Chapter One

The Transportation System

Table 1-1: System Mileage Within the United States (Statute miles)

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Highway[a]	3,545,693	3,689,666	3,730,082	3,838,146	3,859,837	3,863,912	3,866,926	3,883,920	3,901,081	3,905,211	3,906,595	3,912,226	R3,919,652	R3,945,872	R3,906,290	3,917,243	3,936,229
Class I rail[b,c]	207,334	199,798	196,479	191,520	164,822	145,764	119,758	116,626	113,056	110,425	109,332	108,264	105,779	102,128	100,570	99,430	99,250
Amtrak[c]	N	N	N	N	24,000	24,000	24,000	25,000	25,000	25,000	25,000	24,000	25,000	25,000	22,000	23,000	23,000
Transit[d]																	
Commuter rail[c]	N	N	N	N	N	3,574	4,132	4,038	4,013	4,090	4,090	4,160	3,682	4,417	5,172	5,191	U
Heavy rail	N	N	N	N	N	1,293	1,351	1,369	1,403	1,452	1,455	1,458	1,478	1,527	1,527	1,540	U
Light rail	N	N	N	N	N	384	483	551	558	537	562	568	638	659	676	802	U
Navigable channels[e]	25,000	25,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000
Oil pipeline[f]	190,944	210,867	218,671	225,889	218,393	213,605	208,752	203,828	R196,545	R193,980	R190,350	R181,912	177,535	179,873	178,648	177,463	U
Gas pipeline[g]	630,950	767,520	913,267	979,263	1,051,774	1,118,875	1,206,894	1,225,358	1,253,924	1,251,095	1,257,971	1,262,152	1,276,315	1,251,199	R1,294,262	1,345,381	U

KEY: N = data do not exist; R = revised; U = data are not available.

[a] All public road and street mileage in the 50 states and the District of Columbia. For years prior to 1980, some miles of nonpublic roadways are included. No consistent data on private road mileage are available. Beginning in 1998, approximately 43,000 miles of Bureau of Land Management Roads are excluded.

[b] Data represent miles of road owned (aggregate length of road, excluding yard tracks, sidings, and parallel lines).

[c] Portions of Class I freight railroads, Amtrak, and commuter rail networks share common trackage. Amtrak data represent miles of track operated.

[d] Transit system mileage is measured in directional route-miles. A directional route-mile is the mileage in each direction over which public transportation vehicles travel while in revenue service. Directional route-miles are computed with regard to direction of service, but without regard to the number of traffic lanes or rail tracks existing in the right-of-way.

[e] The St. Lawrence Seaway is not included in this number because 3 of the 5 subsections are solely in Canadian waters, and the others are in international boundary waters. Of the 26,000 miles of navigable waterways, 10,867 miles are commercially significant shallow-draft inland waterways subject to fuel taxes.

[f] Includes trunk and gathering lines for crude-oil pipeline.

[g] Excludes service pipelines. Data not adjusted to common diameter equivalent. Mileage as of the end of each year. Includes field and gathering, transmission, and distribution mains. See table 1-8 for a more detailed breakout of oil and gas pipeline mileage.

SOURCES:

Highway:

1960-95: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995,* FHWA-PL-97-009 (Washington, DC: Annual issues), table HM-212.

1996-98,2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table HM-20.

1999: Ibid., personal communication, May 2002.

Class I rail:

1960-2000: Association of American Railroads, *Railroad Facts* (Washington, DC: 2001), p. 45.

Amtrak:

1980: Amtrak, Corporate Planning and Development, personal communication (Washington, DC).

1985-2000: Amtrak, Corporate Planning and Development, *Amtrak Annual Report, Statistical Appendix* (Washington, DC: Annual issues).

Transit:

1985-99: U.S. Department of Transportation, Federal Transit Administration, *National Transit Database* (Washington, DC: Annual issues) table 20 and similar tables in earlier editions.

Navigable channels:

1960-96: U.S. Army Corps of Engineers, Ohio River Division, Huntington District, *Ohio River Navigation System Report, 1996, Commerce on the Ohio River and its Tributaries* (Fort Belvoir, VA: 1996), p. 2.

1997-99: Waterborne Commerce Statistics Center Databases, personal communication, Aug. 3, 2001.

Oil pipeline:

1960-99: Eno Transportation Foundation, Inc., *Transportation in America, 2000* (Washington, DC: 2001), p. 44.

Gas pipeline:

1960-99: American Gas Association, *Gas Facts* (Arlington, VA: Annual issues), table 5-2 and similar tables in earlier editions.

Table 1-2: Number of Air Carriers, Railroads, Interstate Motor Carriers, Marine Vessel Operators, and Pipeline Operators

	1960	1965	1970	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000
Air carriers[a]	**N**	**N**	**39**	**36**	**63**	**102**	**70**	**96**	**96**	**96**	**96**	**94**	**91**
Major air carriers	N	N	N	N	N	13	14	11	12	13	13	13	15
Other air carriers	N	N	N	N	N	89	56	85	84	83	83	81	76
Railroads	**607**	**568**	**517**	**477**	**480**	**500**	**530**	**541**	**553**	**550**	**559**	**555**	**560**
Class I railroads	106	76	71	73	39	25	14	11	10	9	9	9	8
Other railroads	501	492	446	404	441	[f]475	516	530	543	541	550	546	552
Interstate motor carriers[b]	[e]	[e]	[e]	[e]	**U**	**U**	**216,000**	**346,000**	**379,000**	**417,000**	**477,486**	**517,297**	**560,393**
Marine vessel operators[c]	**U**	**U**	**U**	**U**	**U**	**U**	**U**	**2,519**	**2,505**	**2,494**	**2,534**	**[R]2,391**	**U**
Pipeline operators[d]	**N**	**N**	**1,123**	**1,682**	**2,243**	**2,204**	**2,212**	**2,378**	**2,338**	**2,282**	**2,225**	**2,216**	**2,163**
Hazardous liquid	N	N	N	N	N	[f]222	187	209	215	217	225	216	243
Natural gas transmission	N	N	420	432	474	724	866	974	970	954	880	862	828
Natural gas distribution	N	N	938	[g]1,500	[g]1,932	1,485	1,382	1,444	1,397	1,363	1,366	1,382	1,351

KEY: N = data do not exist; U = data are not available; R = revised

[a] Carrier groups are categorized based on their annual operating revenues as major, national, large regional, and medium regional. The thresholds were last adjusted July 1, 1999, and the threshold for major air carriers is currently $1 billion. The other air carrier category contains all national, large regional, and medium regional air carriers.

[b] Figures are for the fiscal year, October through September. The Federal Motor Carrier Safety Administration deletes motor carriers from the Motor Carrier Management Information System (MCMIS) when they receive an official notice of a change in status. This most often occurs when a safety audit or compliance review is attempted. As a result, many inactive carriers are included in the MCMIS.

[c] The printed source materials do not contain totals for the number of operators and data files from which the figures can be determined are not available prior to 1993.

[d] There is some overlap among the operators for the pipeline modes so the total number of pipeline operators is lower than the sum for the three pipeline modes.

[e] Prior to 1980, the source of motor carrier data was the Interstate Commerce Commission (ICC), which was abolished on Jan. 1, 1996. (Certain functions were transferred to the Surface Transportation Board and the Department of Transportation.) The system used by ICC to collect motor carrier data differs significantly from that used by the Federal Motor Carrier Safety Administration in its Motor Carrier Management Information System (MSMIS), which began operations in 1980. The MCMIS is updated weekly, but archive versions are not retained. Because of differences between the two systems, data are not comparable and thus are not included here.

[f] This value is for 1986. The number of hazardous liquid pipeline operators is not available for prior years.

[g] Includes master meter and mobile home park natural gas distribution operators. A master meter system is a pipeline system for distributing gas within, but not limited to, a definable area, such as a mobile home park, housing project, or apartment complex, where the operator purchases metered gas from an outside source for resale through a gas distribution pipeline system. The gas distribution pipeline system supplies the ultimate consumer who either purchases the gas directly through a meter or by other means, such as by rents.

SOURCES:

Air carriers:

U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, *Air Carrier Financial Statistics Quarterly* (Washington, DC: Fourth quarter issues), "Alphabetical List of Air Carriers by Carrier Group ...".

Railroads:

1960-1985: Association of American Railroads, *Railroad Ten-Year Trends* , Vol. 2 (Washington, DC), table I-2.
1986: Ibid., Vol. 3 (Washington, DC), table I-2.
1989-1998: Ibid., Vol. 16 (Washington, DC: 1999), p. 10.
1999: Ibid., *Railroad Facts* (Washington, DC: 2000), p. 3.
2000: Ibid., *Railroad Ten-Year Trends* , Vol. 18 (Washington, DC), p. 9.

Interstate motor carriers:

U.S. Department of Transportation, Federal Motor Carrier Safety Administration, Motor Carrier Management Information System (MCMIS) data, personal communication, Nov. 6, 2001.

Marine vessel operators:

1995-97: U.S. Army, Corps of Engineers, *Waterborne Transportation Lines of the United States, Volume 2, Vessel Company Summary* (New Orleans, LA: Annual issues), source data files obtained by personal communication, Apr. 12, 2000.
1998: Ibid., Internet site: http://www.wrsc.usace.army.mil/ndc/datavess.htm as of Apr. 10, 2000.
1999: Ibid., Internet site: http://www.wrsc.usace.army.mil/ndc/datavess.htm as of Nov. 6, 2001.

Pipeline Operators:

U.S. Department of Transportation, Office of Pipeline Safety, personal communication, Nov. 15, 2001.

Table 1-3: Number of U.S. Airports[a]

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
TOTAL airports	**15,161**	**16,319**	**17,490**	**17,581**	**17,846**	**18,317**	**18,343**	**18,224**	**18,292**	**18,345**	**18,770**	**19,098**	**19,281**	**19,306**
Public use, total	**4,814**	**5,858**	**5,589**	**5,551**	**5,545**	**5,538**	**5,474**	**5,415**	**5,389**	**5,357**	**5,352**	**R5,324**	**5,317**	5,315
% with lighted runways	66.2	68.1	71.4	71.9	72.3	72.8	73.5	74.3	74.5	74.6	74.8	R76.1	75.9	75.9
% with paved runways	72.3	66.7	70.7	71.5	71.6	72.2	72.9	73.3	73.7	74.0	74.2	74.2	74.3	74.3
Private use, total	**10,347**	**10,461**	**11,901**	**12,030**	**12,301**	**12,779**	**12,869**	**12,809**	**12,903**	**12,988**	**13,418**	**13,774**	**13,964**	**13,990**
% with lighted runways	15.2	9.1	7.0	6.8	6.6	6.3	6.2	6.4	6.4	6.4	6.3	6.7	7.2	7.3
% with paved runways	13.3	17.4	31.5	32.0	32.2	32.7	33.0	33.0	32.9	33.0	33.2	31.8	32.0	32.0
TOTAL airports	**15,161**	**16,319**	**17,490**	**17,581**	**17,846**	**18,317**	**18,343**	**18,224**	**18,292**	**18,345**	**18,770**	**19,098**	**19,281**	**19,306**
Certificated[b], total	**730**	**700**	**680**	**669**	**664**	**670**	**672**	**667**	**671**	**660**	**660**	**655**	**651**	**635**
Civil	N	N	N	N	N	N	577	572	577	566	566	565	563	562
Civil-Military	N	N	N	N	N	N	95	95	94	94	94	90	88	73
General aviation, total	**14,431**	**15,619**	**16,810**	**16,912**	**17,182**	**17,637**	**17,671**	**17,557**	**17,621**	**17,685**	**18,110**	**18,443**	**18,630**	**18,760**

KEY: N = data do not exist; R = revised.

[a] Includes civil and joint-use civil-military airports, heliports, STOL (short takeoff and landing) ports, and seaplane bases in the United States and its territories.
[b] Certificated airports serve air-carrier operations with aircraft seating more than 30 passengers.

SOURCES:
1980-2000: U.S. Department of Transportation, Federal Aviation Administration, Administrator's Fact Book (Washington, DC: Annual issues), Internet site http://www.atctraining.faa.gov/ as of Aug. 1, 2001.
2001: U.S. Department of Transportation, Federal Aviation Administration, personal communication, May 27, 2002.

Table 1-4: Public Road and Street Mileage in the United States by Type of Surface[a] (Millions of miles)

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
TOTAL paved and unpaved	**3.546**	**3.690**	**3.730**	**3.838**	**3.860**	**3.864**	**3.867**	**3.884**	**3.901**	**3.905**	**3.907**	**3.912**	**3.934**	**3.958**	**3.949**	**3.930**	**3.950**
Paved[b]																	
Low and intermediate type	0.672	0.758	0.897	0.967	1.041	1.015	1.025	1.030	1.026	1.010	1.043	1.062	1.066	[d]N	[d]N	[d]N	[d]N
High-type	0.558	0.696	0.762	0.888	1.032	1.099	1.230	1.250	1.277	1.268	1.299	1.316	1.314	[d]N	[d]N	[d]N	[d]N
Paved total	**1.230**	**1.455**	**1.658**	**1.855**	**2.073**	**2.114**	**2.255**	**2.280**	**2.303**	**2.278**	**2.342**	**2.378**	**[R]2.381**	**2.410**	**2.420**	**2.451**	**2.504**
Unpaved[c] total	**2.315**	**2.235**	**2.072**	**1.983**	**1.787**	**1.750**	**1.612**	**1.604**	**1.598**	**1.628**	**1.564**	**1.534**	**1.554**	**1.548**	**1.529**	**1.479**	**1.446**

KEY: N = data do not exist.

[a] 1960-1995 data include the 50 states and the District of Columbia; 1996-2000 data include the 50 states, District of Columbia, and Puerto Rico.

[b] Paved mileage includes the following categories: low type (an earth, gravel, or stone roadway that has a bituminous surface course less than 1" thick); intermediate type (a mixed bituminous or bituminous penetration roadway on a flexible base having a combined surface and base thickness of less than 7"); high-type flexible (a mixed bituminous or bituminous penetration roadway on a flexible base having a combined surface and base thickness of 7" or more; high-type composite (a mixed bituminous or bituminous penetration roadway of more than 1" compacted material on a rigid base with a combined surface and base thickness of 7" or more; high-type rigid (Portland cement concrete roadway with or without a bituminous wearing surface of less than 1").

[c] Unpaved mileage includes the following categories: unimproved roadways using the natural surface and maintained to permit passability; graded and drained roadways of natural earth aligned and graded to permit reasonably convenient use by motor vehicles, and that have adequate drainage to prevent serious impairment of the road by normal surface water–surface may be stabilized; and soil, gravel, or stone, a graded and drained road with a surface of mixed soil, gravel, crushed stone, slag, shell, etc.–surface may be stabilized. The percentage of unpaved roads that are nonsurfaced dropped from approximately 42% in the 1960s to about 37% in the first half of the 1970s, to about 32% in 1980 and has held at about 22% since 1985.

[d] Source no longer sorts data into these particular categories for paved minor collectors and local public roads.

NOTES: A public road is any road under the jurisdiction of and maintained by a public authority (federal, state, county, town, or township, local government or instrumentality thereof) and open to public travel. No consistent data on private road mileage are available (although prior to 1980, some nonpublic roadway mileage are included). Most data are provided by the states to the U.S. DOT Federal Highway Administration (FHWA). Some years contain FHWA estimates for some states.
Numbers may not add due to rounding.

SOURCES: 1960-95: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995,* FHWA-PL-97-009 (Washington, DC: July 1997), table HM-212.
1996-2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table HM-12.

Table 1-5: U.S. Public Road and Street Mileage by Functional System[a]

	1990	1991	1992	1993	1994	1995	1996	1997	[b]1998	1999	2000
Urban mileage											
Principal arterials, Interstates	11,527	11,602	12,516	12,877	13,126	13,164	13,217	13,247	13,312	13,343	13,379
Principal arterials, other freeways and expressways	7,668	7,709	8,491	8,841	8,994	8,970	9,027	9,063	9,127	9,132	9,140
Principal arterials, other	51,968	52,515	51,900	52,708	53,110	52,796	52,983	53,223	53,132	53,199	53,312
Minor arterials	74,659	74,795	80,815	86,821	87,857	88,510	89,020	89,185	89,496	89,432	89,789
Collectors	78,254	77,102	82,784	84,854	86,089	87,331	87,790	88,049	88,071	88,005	88,200
Local	520,568	526,139	548,560	559,776	564,609	568,935	574,728	583,973	588,504	592,974	598,421
Total	**744,644**	**749,862**	**785,066**	**805,877**	**813,785**	**819,706**	**826,765**	**836,740**	**841,642**	**846,085**	**852,241**
Rural mileage											
Principal arterials, Interstates	33,547	33,677	32,951	32,631	32,457	32,580	32,820	32,817	32,813	32,974	33,048
Principal arterials, other	83,802	86,747	94,947	96,770	97,175	97,948	98,131	98,257	98,852	98,838	98,911
Minor arterials	144,774	141,795	137,685	137,577	138,120	137,151	137,359	137,497	137,308	137,462	137,574
Major collectors	436,352	436,746	434,072	432,222	431,115	431,712	432,117	432,714	432,408	432,934	433,121
Minor collectors	293,922	293,511	284,504	282,182	282,011	274,081	273,198	272,362	272,140	271,676	271,815
Local	2,129,885	2,141,582	2,131,856	2,117,952	2,111,932	2,119,048	2,119,262	2,135,485	2,091,127	2,097,274	2,109,519
Total	**3,122,282**	**3,134,058**	**3,116,015**	**3,099,334**	**3,092,810**	**3,092,520**	**3,092,887**	**3,109,132**	**3,064,648**	**3,071,158**	**3,083,988**
TOTAL urban and rural mileage	**3,866,926**	**3,883,920**	**3,901,081**	**3,905,211**	**3,906,595**	**3,912,226**	**3,919,652**	**3,945,872**	**3,906,290**	**3,917,243**	**3,936,229**

[a] Includes the 50 states and the District of Columbia. When states did not submit reports, data were estimated by the U.S. Department of Transportation, Federal Highway Administration.

[b] Beginning in 1998, approximately 43,000 miles of Bureau of Land Management roads are excluded.

NOTE: A public road is any road under the ownership of and maintained by a public authority (federal, state, county, town, or township, local government, or instrumentality thereof) and open to public travel. No consistent data on private road mileage are available. For more detailed information, including breakouts of mileage by ownership and type of surface, see the source document.

SOURCES: 1990-95: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995,* FHWA-PL-97-009 (Washington, DC: July 1997), table HM-220.

1996-98, 2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table HM-20. Available at www.fhwa.dot.gov/ohim/ohimstat.htm as of October 2001.

1999: Ibid., personal communication, May 2002.

Table 1-6: Estimated U.S. Roadway Lane-Miles by Functional System[a]

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	R,d1998	R1999	2000
TOTAL lane-miles	**7,922,174**	**8,017,994**	**8,051,081**	**8,087,793**	**8,124,090**	**8,132,196**	**8,143,014**	**8,158,253**	**8,178,654**	**R8,242,437**	**8,160,858**	**8,177,983**	**8,223,393**
Urban													
Interstates	48,458	57,295	62,214	62,826	67,266	69,184	70,832	71,377	71,790	R72,257	73,006	73,293	73,915
Other arterials[b]	333,673	371,649	399,376	402,360	418,208	435,386	442,474	445,828	449,480	R453,623	454,060	450,411	455,857
Collectors	145,128	162,377	167,770	165,288	176,137	179,653	183,353	185,032	186,923	R188,850	187,533	186,334	188,568
Local	867,986	951,018	1,041,136	1,052,278	1,097,120	1,119,552	1,129,218	1,137,870	1,149,456	R1,167,946	1,177,009	1,185,948	1,196,840
Total	**1,395,245**	**1,542,339**	**1,670,496**	**1,682,752**	**1,758,731**	**1,803,775**	**1,825,877**	**1,840,107**	**1,857,649**	**R1,882,676**	**1,891,608**	**1,895,986**	**1,915,180**
Rural													
Interstates	130,980	131,907	135,871	136,503	133,467	132,138	131,266	131,916	132,963	133,165	133,231	134,198	134,587
Other arterials[b]	507,098	510,005	517,342	517,813	526,714	525,906	529,818	530,706	532,856	R536,989	537,993	539,293	539,918
Collectors[c]	1,431,267	1,466,789	1,467,602	1,467,561	1,441,466	1,434,473	1,432,189	1,417,428	1,416,662	R1,418,637	1,415,774	1,413,953	1,414,665
Local	4,457,584	4,366,954	4,259,770	4,283,164	4,263,712	4,235,904	4,223,864	4,238,096	4,238,524	R4,270,970	4,182,252	4,194,553	4,219,043
Total	**6,526,929**	**6,475,655**	**6,380,585**	**6,405,041**	**6,365,359**	**6,328,421**	**6,317,137**	**6,318,146**	**6,321,005**	**R6,359,761**	**6,269,250**	**6,281,997**	**6,308,213**

KEY: R = revised.

[a] Includes the 50 States and the District of Columbia.

[b] For urban: the sum of other freeways and expressways, other principal arterials, and minor arterials. For rural: the sum of other principal arterials and minor arterials.

[c] Includes minor and major collectors.

[d] Beginning in 1998, approximately 86,000 lane-miles of Bureau of Land Management roads are excluded.

NOTE: In estimating rural and urban lane mileage, the U.S. Department of Transportation, Federal Highway Administration assumed that rural minor collectors and urban/rural local roads are two lanes wide.

SOURCES: 1980-95: U.S. Department of Transportation, Federal Highway Administration, Office of Highway Information Management, table HM-260 (unpublished).

1996-1998, 2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table HM-60. Internet address www.fhwa.dot.gov/ohim.ohimstat.htm as of Dec. 27, 2001.

1999: Ibid., personal communication, June 5, 2002.

Table 1-7: Number of Stations Served by Amtrak and Rail Transit, Fiscal Year

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Amtrak	510	503	491	487	498	504	516	523	524	535	540	530	542	516	508	510	515
Rail transit	1,822	1,895	1,920	2,164	2,027	2,143	2,169	2,192	2,240	2,286	2,376	2,382	R2,325	2,391	2,524	R2,567	2,595

KEY: R = revised.

NOTE: Rail transit is sum of commuter rail, heavy rail, and light rail. In several large urban areas, Amtrak and commuter rail stations are shared.

SOURCES:

Amtrak:

Amtrak, *Amtrak Annual Report* , Statistical Appendix (Washington, DC: Annual issues).

Rail transit:

U.S. Department of Transportation, Federal Transit Administration, National Transit Database (Washington, DC: Annual issues), table 20 (for 2000 issue) and similar tables in earlier editions.

Table 1-8: U.S. Oil and Gas Pipeline Mileage

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Oil pipeline																
Crude lines[a]	141,085	149,424	146,275	145,679	129,831	117,812	118,805	115,860	110,651	107,246	103,277	R97,029	92,610	91,523	87,663	86,369
Product lines	49,859	61,443	72,396	80,210	88,562	95,793	89,947	87,968	85,894	86,734	87,073	R84,883	84,925	88,350	90,985	91,094
Total	**190,944**	**210,867**	**218,671**	**225,889**	**218,393**	**213,605**	**208,752**	**203,828**	**196,545**	**193,980**	**190,350**	**R181,912**	**177,535**	**179,873**	**178,648**	**177,463**
Gas pipeline[b]																
Distribution mains	391,400	494,500	594,800	648,200	701,800	753,400	837,300	857,500	883,200	908,300	919,300	936,800	959,500	957,100	R999,000	1,045,919
Transmission pipelines[c]	183,700	211,300	252,200	262,600	266,500	271,200	280,100	281,600	284,500	269,600	268,300	263,900	259,300	251,100	R255,800	263,347
Field and gathering lines	55,800	61,700	66,300	68,500	83,500	94,300	89,500	86,300	86,200	73,100	70,400	60,400	57,500	43,000	R40,200	36,115
Total	**630,950**	**767,520**	**913,267**	**979,263**	**1,051,774**	**1,118,875**	**1,206,894**	**1,225,358**	**1,253,924**	**1,251,095**	**1,257,971**	**1,261,100**	**1,276,315**	**1,251,200**	**R1,295,000**	**1,345,381**

KEY: R = revised; U = data are not available.

[a] Includes trunk and gathering lines.
[b] Excludes service pipe. Data are not adjusted to common diameter equivalent. Mileage as of the end of each year.
[c] After 1975, includes 5,000-6,200 miles of underground storage pipe.

NOTE: For gas pipeline data from 1960-1998, numbers may not add to totals due to rounding because the source provides exact numbers for totals, but rounded mileage for subtotals. Exact subtotals were available for 1999.

SOURCES:
Oil pipeline:
1960-99: Eno Transportation Foundation, Inc., *Transportation in America, 2000* (Washington, DC: 2001), p. 44.
Gas pipeline:
1960-97,1999: American Gas Association, *Gas Facts* (Arlington, VA: Annual issues), tables 5-1 and 5-3, and similar tables in earlier editions.
1998: Ibid., personal communications as of Dec. 19, 2001.

Table 1-9 Number of U.S. Aircraft, Vehicles, Vessels, and Other Conveyances

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Air																
Air carrier[a]	2,135	2,125	2,679	2,495	3,808	4,678	6,083	6,054	7,320	7,297	7,370	7,411	7,478	7,616	8,111	8,228
General aviation[b] (active fleet)	76,549	95,442	131,743	168,475	211,045	210,654	R198,000	R196,874	R185,650	R177,120	R172,935	R188,089	R191,129	R192,414	204,710	219,464
Highway (registered vehicles)																
Passenger car	61,671,390	75,257,588	89,243,557	106,705,934	121,600,843	127,885,193	133,700,496	128,299,601	126,581,148	127,327,189	127,883,469	128,386,775	129,728,341	129,748,704	131,838,538	132,432,044
Motorcycle	574,032	1,381,956	2,824,098	4,964,070	5,693,940	5,444,404	4,259,462	4,177,365	4,065,118	3,977,856	3,756,555	3,897,191	3,871,599	3,826,373	3,879,450	4,152,433
Other 2-axle 4-tire vehicle	N	[g]	14,210,591	20,418,250	27,875,934	37,213,863	48,274,555	53,033,443	57,091,143	59,993,706	62,903,589	65,738,322	69,133,913	70,224,082	71,330,205	75,356,376
Truck																
Single-unit 2-axle 6-tire or more truck	N	13,999,285	3,681,405	4,231,622	4,373,784	4,593,071	4,486,981	4,480,815	4,369,842	4,407,850	4,906,385	5,023,670	5,266,029	5,293,358	5,734,925	5,762,864
Combination truck	[h]11,914,249	786,510	905,082	1,130,747	1,416,869	1,403,266	1,708,895	1,691,331	1,675,363	1,680,305	1,681,500	1,695,751	1,746,586	1,789,968	1,997,345	2,028,562
Bus	272,129	314,284	377,562	462,156	528,789	593,485	626,987	631,279	644,732	654,432	670,423	685,503	694,781	697,548	715,540	728,777
Total highway	**74,431,800**	**91,739,623**	**111,242,295**	**137,912,779**	**161,490,159**	**177,133,282**	**193,057,376**	**192,313,834**	**194,427,346**	**198,041,338**	**201,801,921**	**205,427,212**	**210,441,249**	**211,580,033**	**215,496,003**	**220,461,056**
Transit[c]																
Motor bus	49,600	49,600	49,700	50,811	59,411	64,258	58,714	60,377	63,080	64,850	68,123	67,107	71,678	72,770	R72,142	P74,228
Light rail cars	2,856	1,549	1,262	1,061	1,013	717	913	1,095	1,058	1,025	1,054	999	1,140	1,229	R1,220	P1,297
Heavy rail cars	9,010	9,115	9,286	9,608	9,641	9,326	10,419	10,331	10,245	10,261	10,138	10,157	10,201	10,242	10,301	P10,306
Trolley bus	3,826	1,453	1,050	703	823	676	832	752	907	851	877	885	871	859	880	P859
Commuter rail cars and locomotives	N	N	N	N	4,500	4,035	4,415	4,370	4,413	4,494	4,517	4,565	4,665	4,943	R4,963	P4,883
Demand response	N	N	N	N	N	14,490	16,471	17,879	20,695	23,527	28,729	29,352	30,804	32,509	R29,646	P31,884
Other[d]	N	N	N	N	N	867	1,197	1,595	1,853	2,308	2,505	2,809	3,003	3,808	R4,703	P5,059
Rail																
Class I																
Freight cars	1,658,292	1,478,005	1,423,921	1,359,459	1,168,114	867,070	658,902	633,489	605,189	587,033	590,930	583,486	570,865	568,493	575,604	579,140
Locomotive	29,031	27,780	27,077	27,846	28,094	22,548	18,835	18,344	18,004	18,161	18,505	18,812	19,269	19,684	20,261	20,256
Nonclass I freight cars	32,104	37,164	29,787	29,407	102,161	111,086	103,527	97,492	90,064	88,513	86,120	84,724	87,364	116,108	121,659	126,762
Car companies and shippers freight cars	275,090	285,793	330,473	334,739	440,552	443,530	449,832	458,679	477,883	497,586	515,362	550,717	582,344	585,818	618,404	662,934
Amtrak																
Passenger train car	N	N	N	1,913	2,128	1,854	1,863	1,786	1,796	1,853	1,852	1,722	1,730	1,728	1,962	1,992
Locomotive	N	N	N	355	419	291	318	316	336	360	338	313	299	332	345	329
Water																
Nonself-propelled vessels[e]	16,777	17,033	19,377	25,515	31,662	33,597	31,209	[i]	30,899	30,785	30,730	31,360	32,811	33,011	33,509	33,387
Self-propelled vessels[f]	6,543	6,083	6,455	6,144	7,126	7,522	8,236	[i]	8,311	8,323	8,334	8,281	8,293	8,408	8,523	8,379
Oceangoing steam and motor ships (1,000 gross tons and over)	2,926	2,376	1,579	857	864	737	636	619	603	565	543	509	495	477	470	463
Recreational boats[j]	R2,450,484	R4,138,140	R5,128,345	R7,303,286	R8,577,857	9,589,483	10,996,253	11,068,440	11,132,386	11,282,736	11,429,585	11,734,710	11,877,938	12,312,982	12,565,930	12,738,271

KEY: N = data do not exist; P = preliminary; R = revised.

[a] Air carrier aircraft are those carrying passengers or cargo for hire under 14 CFR 121 and 14 CFR 135. Beginning in 1990, the number of aircraft is the monthly average of the number of aircraft reported in use for the last three months of the year. Prior to 1990, it was the number of aircraft reported in use during December of a given year.

[b] 1991-94 data revised to reflect changes in adjustment for nonresponse bias with 1996 telephone survey factors; 1995-97 data may not be comparable to 1994 and earlier years due to changes in methodology. Includes air taxi aircraft.

[c] Prior to 1984, excludes most rural and smaller systems funded via Sections 18 and 16(b)(2), Urban Mass Transportation Act of 1964, as amended. Also prior to 1984, includes total vehicles owned and leased.

[d] Other includes aerial tramway, automated guideway transit, cablecar, ferry boat, inclined plane, monorail, and vanpool.

[e] Nonself-propelled vessels include dry-cargo barges, tank barges, and railroad-car floats.

[f] Self-propelled vessels include dry-cargo and/or passenger, offshore supply vessels, railroad-car ferries, tankers, and towboats.

[g] Included in single-unit truck.

[h] All trucks.

[i] Data for Jan. 1, 1991-June 30, 1991 included in 1990 figure.

[j] Recreational vessels that are required to be numbered in accordance with Chapter 123 of Title 46 U.S.C.

NOTES: Transit motor bus figure is also included as part of bus in the highway category.
For more detail on oceangoing vessels, see table 1-19.

SOURCES:
Air:
Air carrier:
1960-65: U.S. Department of Transportation, Federal Aviation Administration, *FAA Statistical Handbook of Aviation, 1970* (Washington, DC: 1970), table 5.3.
1970-75: Ibid., *1979 edition* (Washington, DC: 1979), table 5.1.
1980-85: Ibid., *Calendar Year 1986* (Washington, DC: 1986), table 5.1.
1990-94: Ibid., *Calendar Year 1997* (Washington, DC: unpublished), table 5.1, personal communication, Mar. 19, 1999.
1995-99: Aerospace Industries Association, *Aerospace Facts and Figures* (Washington DC: 2000/2001), "Active U.S. Air Carrier Fleet".
General aviation:
1960-65: U.S. Department of Transportation, Federal Aviation Administration, *FAA Statistical Handbook of Aviation, 1969* (Washington, DC: 1969), table 9.10.
1970-75: Ibid., *Calendar Year 1976* (Washington, DC: 1976), table 8-6.
1980: Ibid., *General Aviation Activity Survey, Calendar Year 1980* (Washington, DC: 1981), table 1-3.
1985: Ibid., *Calendar Year 1985* (Washington, DC: 1987), table 2-9.
1990-99: Ibid., *General Aviation and Air Taxi Activity Survey, Calendar Year 1999* (Washington, DC: 2000), table 1.2.
Highway:
Passenger car:
1960-94: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995,* FHWA-PL-97-009 (Washington, DC: July 1997), table MV-201.
1995-99: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table VM-1.
Motorcycle:
1960-94: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995,* FHWA-PL-97-009 (Washington, DC: July 1997), table MV-201.
1995-99: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table VM-1.
Other 2-axle 4-tire vehicles:
1970-94: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995,* FHWA-PL-97-009 (Washington, DC: July 1997), table VM-201A.
1995-99: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table VM-1.
Single-unit and combination trucks, and buses:
1960-94: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995,* FHWA-PL-97-009 (Washington, DC: July 1997), table VM-201A.
1995-99: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table VM-1.
Transit:
1960-97: American Public Transit Association, *Transit Fact Book* (Washington, DC: 1999), table 44.
1998-99: Ibid., *Public Transportation Fact Book* (Washington DC:2001), table 46.
Rail (all categories, except Amtrak):
1960-99: Association of American Railroads, *Railroad Facts 2000* (Washington, DC: October 2000), pp. 48, 50.
Amtrak:
Passenger train-cars and locomotives:
1975-80: Amtrak, State and Local Affairs Department, personal communication.
1985-99: Ibid., *Amtrak Annual Report,* Statistical Appendix (Washington, DC: Annual issues), p. 47.
Water transportation:
Nonself-propelled vessels and self-propelled vessels:
1960-99: U.S. Army, Corps of Engineers, *Waterborne Transportation Lines of the United States, Volume 1, National Summaries* (New Orleans, LA : Annual issues).
Oceangoing steam motor ships:
1960-99: U.S. Department of Transportation, Maritime Administration, *Merchant Fleets of the World* (Washington, DC: Annual issues).
Recreational boats:
1960-99: U.S. Department of Transportation, U.S. Coast Guard, *Boating Statistics* (Washington, DC: Annual issues).

Table 1-10: Sales or Deliveries of New Aircraft, Vehicles, Vessels, and Other Conveyances

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Civilian aircraft (shipments)																	
Transport [a]	245	233	311	315	387	278	521	589	567	408	309	256	269	374	559	620	490
Helicopters	N	598	482	864	1,366	384	603	571	324	258	308	292	278	346	363	R361	494
General aviation	7,588	11,852	7,283	14,072	11,881	2,029	1,144	1,021	899	964	928	1,077	1,130	1,569	2,213	R2,496	2,795
Highway																	
Passenger car (new retail sales)	6,641,000	9,332,000	8,400,000	8,624,000	8,979,000	11,042,000	9,300,000	8,175,000	8,213,000	8,518,000	8,991,000	8,635,000	8,527,000	8,272,000	R8,142,000	R8,698,000	8,847,000
Motorcycle (new retail sales) [b]	N	N	1,125,000	940,000	1,070,000	710,000	303,000	280,000	278,000	293,000	306,000	309,000	330,000	356,000	432,000	R539,000	U
Truck (factory sales) [c]	1,194,475	1,716,564	1,660,446	2,231,630	1,667,283	3,356,905	3,692,474	3,363,445	4,039,518	4,870,675	5,617,866	5,689,551	5,748,147	6,125,935	6,407,702	7,345,059	7,022,478
Bus (includes school bus) (factory sales)	[i]	35,241	31,994	40,530	34,385	33,533	32,731	24,058	22,484	24,549	22,409	23,918	27,583	26,882	27,483	[i]	[i]
Recreational vehicle (shipments)	N	192,830	380,300	339,600	178,500	351,700	347,300	293,700	382,700	420,200	518,800	475,200	466,800	438,800	441,300	R481,200	418,300
Bicycle [d]	N	N	N	N	9,000,000	11,400,000	10,800,000	11,600,000	11,600,000	13,000,000	12,500,000	12,000,000	10,900,000	11,000,000	11,100,000	R11,600,000	11,900,000
Transit (deliveries)																	
Motor bus [e]	2,415	3,000	1,424	5,261	4,572	3,367	4,779	4,722	3,426	4,836	5,418	6,022	6,016	6,329	7,135	P6,815	U
Light rail	0	0	0	0	32	63	55	17	35	54	72	38	39	76	80	123	P136
Heavy rail	416	580	308	127	130	441	10	6	163	260	55	72	10	34	120	122	P204
Trolley bus	0	0	0	1	98	0	118	149	0	24	36	3	3	0	54	P0	U
Commuter rail	214	666	302	2,165	152	179	83	187	110	8	47	38	111	198	122	132	P116
Class I rail (deliveries)																	
Freight car [f]	57,047	77,822	66,185	72,392	85,920	12,080	32,063	24,678	25,761	35,239	48,819	60,853	57,877	50,396	75,685	74,223	55,791
Locomotive	389	1,387	1,029	772	1,480	522	530	472	321	504	821	928	761	743	889	709	640
Amtrak (deliveries)																	
Passenger train car	N	N	N	109	109	N	58	0	0	0	64	76	92	10	0	0	26
Locomotive	N	N	N	30	17	10	0	0	20	26	18	10	0	111	35	0	4
Water transport																	
Merchant vessel [g]	20	13	13	15	23	14	0	0	3	0	1	1	0	1	4	2	0
Recreational boat [h]	N	N	N	N	642,800	674,600	525,300	448,000	466,750	498,775	576,200	663,760	634,750	610,100	R575,800	R584,900	578,700

KEY: N = data do not exist; P = preliminary; R = revised; U = data are not available.

[a] U.S.-manufactured fixed-wing aircraft over 33,000 pounds empty weight, including all jet transports plus the 4-engine turboprop-powered Lockheed L-100.

[b] Includes domestic and imported vehicles. Prior to 1985, all terrain vehicles (ATVs) were included in the motorcycle total. In 1995, the Motorcycle Industry Council revised its data for the years 1985 to present to exclude ATVs from its totals.

[c] Includes large passenger or utility vehicles that may be considered cars in other tables.

[d] Includes domestic and imported vehicles, wheel sizes 20 inches and over. Data from 1997 onwards are projections.

[e] Buses or bus-type vehicles only. Includes demand response. Excludes vanpool vans and most rural and smaller systems prior to 1984. Transit motor bus figure is also included as part of the bus total in the highway category.

[f] Includes all railroads and private car owners.

[g] Self-propelled, 1,000 or more gross tons.

[h] Retail unit estimates. Includes outboard, inboard, and sterndrive boats, jet boats (since 1995), personal watercraft (since 1991), sailboats and canoes. Also includes inflatable boats (until 1992) and sailboards (until 1990).

[i] Included in truck figure.

SOURCES:

Civilian aircraft:

1960-2000: Aerospace Industries Association, *Aerospace Facts and Figures* (Washington, DC: Annual issues), "Civil Aircraft Shipments".

Highway:

Passenger cars and trucks:

1960-97: American Automobile Manufacturers Association, *Motor Vehicle Facts & Figures, 1998* (Southfield, MI: 1999), p. 21 (passenger car) and p. 6 (truck).

1998-2000: Ward's Communications, *Motor Vehicle Facts & Figures*, 2001 (Detroit, MI: 2001), p. 21 (passenger car) and p. 6 (truck).

Motorcycles:

1970-99: Motorcycle Industry Council, Inc., *Motorcycle Statistical Annual, 2000* (Irvine, CA: 2001), p. 8 and similar tables in earlier editions.

Buses:

1965-97: American Automobile Manufacturers Association, *Motor Vehicle Facts & Figures, 1998* (Detroit, MI: 1998), p. 6 and similar tables in earlier editions.

1998-2000: Ward's Communications, *Motor Vehicle Facts & Figures*, 1999 (Detroit, MI: 1999), p. 6 and similar tables in earlier editions.

Recreational vehicles:

1965-97: Ibid., *Motor Vehicle Facts & Figures, 1998* (Detroit, MI: 1998), p. 12 and similar tables in earlier editions.

1998-2000: Ward's Communications, *Motor Vehicle Facts & Figures*, 2001 (Detroit, MI: 2001), p. 11.

Bicycles:
1980-2000: National Bicycle Dealers Association, Internet site http://www.nbda.com as of Aug. 7, 2001, and personal communication, Sept. 24, 1996.
Transit:
1960-99: American Public Transit Association 2001, *Public Transportation Fact Book* (Washington, DC: March 2001), table 56 and similar tables in earlier editions.
Class I rail:
1960-2000: Association of American Railroads, *Railroad Facts* (Washington, DC: 2001), p. 55 and similar tables in earlier editions.
Amtrak:
1975-80: Ibid., *Railroad Facts* (Washington, DC: 1997), p. 17 and similar tables in earlier editions.
1985-2000: Amtrak, *Amtrak Annual Report,* Statistical Appendix (Washington, DC: Annual issues).
Water:
Merchant vessel:
1960-2000: U.S. Department of Transprotation, Maritime Administration, *Merchant Fleets of the World* (Washington, DC: Annual issues).
Recreational boat:
1980-2000: National Marine Manufacturers Association, *Boating 2000* (Chicago, IL: 2001), annual retail unit estimates.

Table 1-11: Active Air Carrier and General Aviation Fleet by Type of Aircraft

	1965	1970	1975	1980	[a]1985	[a]1990	1991	1992	1993	1994	1995	1996	[R]1997	[R]1998	1999
AIR CARRIER[b]	**2,125**	**2,679**	**2,495**	**3,808**	**4,678**	**6,083**	**6,054**	**7,320**	**7,297**	**7,370**	**7,411**	**7,478**	**7,616**	**8,111**	**8,228**
Fixed Wing	**2,104**	**2,663**	**2,488**	**3,803**	**4,673**	**6,072**	**6,048**	**7,187**	**7,173**	**7,242**	**7,293**	**7,357**	**7,482**	**7,994**	**8,106**
Turbojet															
Four engine	511	931	602	436	322	432	410	389	410	420	435	440	450	447	441
Three engine	173	659	994	1,347	1,488	1,438	1,376	1,381	1,292	1,236	1,210	1,212	1,224	1,238	1,181
Two engine	41	546	518	743	1,354	2,278	2,381	2,676	2,882	2,980	[R]3,187	3,270	3,434	3,726	4,008
Total turbojet	**725**	**2,136**	**2,114**	**2,526**	**3,164**	**4,148**	**4,167**	**4,446**	**4,584**	**4,636**	**[R]4,832**	**4,922**	**5,108**	**5,411**	**5,630**
Turboprop															
Four engine	215	110	68	92	108	88	75	107	102	87	81	56	45	39	28
Two engine	89	259	192	590	965	1,507	1,523	1,787	1,751	1,695	[R]1,632	[R]1,635	1,596	1,789	1,759
One engine	8	5	N	N	N	N	N	N	15	0	0	5	5	4	1
Total turboprop	**312**	**374**	**260**	**682**	**1,073**	**1,595**	**1,598**	**1,894**	**1,868**	**1,782**	**[R]1,713**	**[R]1,696**	**1,646**	**1,832**	**1,788**
Piston															
Four engine	447	34	37	73	38	31	26	20	22	19	15	18	19	17	19
Three engine	590	110	69	N	4	6	5	5	0	5	1	7	4	3	3
Two engine	30	9	8	522	394	292	252	415	293	335	[R]333	[R]317	298	391	292
One engine	N	N	N	N	N	N	N	407	406	465	399	397	407	340	374
Total piston	**1,067**	**153**	**114**	**595**	**436**	**329**	**283**	**847**	**721**	**824**	**[R]748**	**[R]739**	**728**	**751**	**688**
Helicopter	**21**	**16**	**7**	**2**	**5**	**11**	**6**	**133**	**124**	**128**	**118**	**121**	**134**	**117**	**122**
GENERAL AVIATION (GENERAL FLEET)[c]	**95,442**	**161,743**	**168,475**	**211,043**	**196,500**	**198,000**	**196,874**	**185,650**	**177,120**	**172,935**	**188,089**	**191,129**	**192,414**	**204,710**	**219,464**
Fixed Wing	**[d]93,130**	**127,934**	**161,570**	**200,097**	**184,700**	**184,500**	**182,585**	**171,671**	**156,936**	**150,158**	**162,342**	**163,691**	**166,854**	**175,203**	**184,723**
Turbojet															
Two engine	N	[e]822	[e]1,742	2,551	3,600	3,700	3,863	3,738	3,426	3,652	4,071	4,077	4,638	5,513	6,387
Other	N	128	[f]34	441	50	400	263	266	237	262	488	347	539	552	733
Total turbojet	**N**	**950**	**1,776**	**2,992**	**4,100**	**4,100**	**4,126**	**4,004**	**3,663**	**3,914**	**4,559**	**4,424**	**5,178**	**6,066**	**7,120**
Turboprop															
Two engine	N	1,287	[e]2,486	3,966	4,900	4,900	4,415	4,187	3,443	3,605	4,295	4,917	4,939	5,076	4,641
One engine	N	138	33	N	N	N	N	N	650	481	668	719	650	1,033	1,018
Other	N	33	N	123	100	400	526	599	24	7	32	80	29	65	21
Total turboprop	**N**	**1,458**	**2,519**	**4,090**	**5,000**	**5,300**	**4,941**	**4,786**	**4,116**	**4,092**	**4,995**	**5,716**	**5,619**	**6,174**	**5,679**
Piston															
Two engine	[e]11,422	15,835	[e]20,331	24,366	22,100	21,100	20,551	17,966	15,626	14,750	15,706	16,082	15,938	18,659	20,930
One engine	81,134	109,492	136,944	168,435	153,400	154,000	152,836	144,837	133,516	127,351	137,049	137,401	140,038	144,234	150,886
Other	N	199	N	212	100	100	131	77	14	51	33	68	79	70	108
Total piston	**92,556**	**125,526**	**157,275**	**193,014**	**175,600**	**175,200**	**173,518**	**162,881**	**149,156**	**142,152**	**152,788**	**153,551**	**156,056**	**162,963**	**171,923**
Rotorcraft	**1,503**	**2,255**	**4,073**	**6,001**	**6,000**	**6,900**	**6,238**	**5,979**	**4,721**	**4,728**	**5,830**	**6,570**	**6,786**	**7,425**	**7,448**
Piston	N	1,666	2,499	2,794	2,700	3,200	2,390	2,348	1,846	1,627	1,863	2,507	2,259	2,545	2,564
Turbine															
Multiengine	N	N	N	N	N	N	N	N	629	616	733	643	764	843	839
One engine	N	589	N	N	N	N	N	N	2,246	2,485	3,234	3,420	3,762	4,038	4,045
Total turbine	**N**	**589**	**1,574**	**3,207**	**3,300**	**3,700**	**3,848**	**3,631**	**2,875**	**3,101**	**3,967**	**4,063**	**4,527**	**4,881**	**4,884**
Other Aircraft	**809**	**1,554**	**2,832**	**4,945**	**5,800**	**6,600**	**8,051**	**8,000**	**5,037**	**5,906**	**4,741**	**4,244**	**4,092**	**5,580**	**6,765**
Gliders	N	N	N	N	N	N	N	N	1,814	2,976	2,182	1,934	2,016	2,105	2,041
Lighter-than-Air	N	N	N	N	N	N	N	N	3,223	2,931	2,559	2,310	2,075	3,475	4,725
Experimental	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**10,426**	**12,144**	**15,176**	**16,625**	**14,680**	**16,502**	**20,528**
Amateur Built	N	N	N	N	N	N	N	N	6,171	8,833	9,328	11,566	10,261	13,189	16,858
Exhibition	N	N	N	N	N	N	N	N	1,868	637	2,245	2,094	1,798	1,630	1,999
Other	N	N	N	N	N	N	N	N	2,387	2,674	3,603	2,965	2,620	1,684	1,671

KEY: N = data are not available; R = revised.

[a] Source reported rounded data for general aviation.

[b] Air carrier aircraft are aircraft carrying passengers or cargo for hire under 14 CFR 121 (large aircraft- more than 30 seats) and 14 CFR 135 (small aircraft- 30 seats or less). This definition is more encompassing than that in the Federal Aviation Administration (FAA) Aviation Forecast- jet aircraft, 60 seats or more carrying passengers or cargo for hire. Beginning in 1990, the number of aircraft is the monthly average reported in use for the last three months of the year. Prior to 1990, it was the number of aircraft reported in use during December of a given year.

[c] Columns may not add to totals due to estimation procedures. Beginning in 1993, excludes commuters. Prior to 1993, single engine turboprops were included in "Other turboprops"; single and multiengine turbine rotorcraft were not shown separately; gliders and lighter-than-air aircraft were combined into the "Other" category; and experimental aircraft were included in the appropriate aircraft type. For example, prior to 1993, the single engine piston aircraft type included both experimental and nonexperimental aircraft Starting in 1993, that aircraft type only includes nonexperimental aircraft. Due to changes in methodology beginning in 1995, estimates may not be comparable to those for 1994 and earlier years. Values for 1991 through 1994 were revised to reflect changes in adjustment for nonresponse bias.

[d] Total includes 574 turbine aircraft of unspecified subtype.

[e] Multiengine.

[f] Single-engine.

NOTES:

Prior to 1970, aircraft counts included aircraft retained in FAA data systems until the owners requested that they be deregistered. As a result, thousands of aircraft that had been destroyed over the years remained in the system. Since 1970, annual verification of aircraft registrations is required. Failure to comply with this requirement leads to revocation of the registration certificate and exclusion of the aircraft from the official count of the following year. Listed engine configurations (e.g., two-, three-, multi-) represent all applicable combinations for each aircraft type. Totals may not agree with those in other tables as revisions to prior year data are reported at the aggregate level only.

SOURCES:

Air carriers:

1965: U.S. Department of Transportation, Federal Aviation Administration, *FAA Statistical Handbook of Aviation, 1966 Edition.* (Washington, DC: 1966), table 7.5.

1970: Ibid., *Calendar Year 1971.* (Washington, DC: 1972), table 5.5.

1975: Ibid., *Calendar Year 1975.* (Washington, DC: Dec. 31, 1975), table 5.3.

1980: Ibid., *Calendar Year 1980.* (Washington, DC: Dec. 31, 1980), table 5.2.

1985: Ibid., *Calendar Year 1993.* FAA-APO-95-5 (Washington, DC: 1995), table 5.2.

1990-94: Ibid., *Calendar Year 1996,* Internet site: http://www.api.faa.gov/handbook96/toc96.htm, as of Mar. 31, 2000, table 5.2.

1995-99: Aerospace Industries Association, Aerospace Facts and Figures (Washington DC: 2000/2001), "Active U.S. Air Carrier Fleet."

General aviation:

1965: U.S. Department of Transportation, Federal Aviation Administration, *FAA Statistical Handbook of Aviation, 1966 Edition.* (Washington, DC: 1966), table 5.1.

1970: Ibid., *Calendar Year 1971.* (Washington, DC: 1972), table 8.3.

1975: Ibid., *Calendar Year 1975.* (Washington, DC: Dec. 31, 1975), table 8.4.

1980: Ibid., *General Aviation Activity and Avionics Survey, Annual Report Calendar Year 1980,* FAA-MS-81-5 (Washington, DC: December 1985), table 2-6.

1985: Ibid., *Annual Summary Report 1994 Data,* FAA-APO-95-10 (Washington, DC: 1996), table 1.2.

1990: Ibid., *General Aviation and Air Taxi Activity Survey, Calendar Year 1998, FAA-APO-00-6* (Washington, DC: 2000), table 1.2.

1991-99: Ibid, Internet site http://www.api.faa.gov/GA2001/TABOFCOn.htm as of Mar. 5, 1999.

Table 1-12: U.S. Automobile and Truck Fleets by Use (Thousands)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
TOTAL automobiles and trucks in fleets						**15,257**	**15,570**	**15,869**	**16,879**	**15,530**	**15,196**
Number of automobiles in fleets of 25 or more (10 or more cars for 1999 and 2000)[a]											
Business[b]	2,889	2,628	2,492	1,751	1,722	1,326	1,295	1,188	1,159	3,195	2,950
Government[c]	538	504	516	401	428	1,214	1,209	1,218	1,030	885	883
Utilities	551	544	548	386	382	376	376	377	359	320	317
Police	249	250	264	264	266	269	274	280	289	302	306
Taxi (includes vans)	141	141	140	140	141	139	130	181	190	135	136
Rental (includes vans and SUVs)	990	1,160	1,448	1,501	1,473	1,518	1,590	1,608	1,602	1,733	1,581
Number of automobiles in fleets of 4 to 24 (4 to 9 cars for 1999 and 2000)[a]	U	U	U	U	U	4,200	4,250	4,373	4,921	1,172	1,173
Total automobiles in fleets						**9,042**	**9,124**	**9,225**	**9,550**	**7,742**	**7,346**
Number of trucks in fleets of 25 or more (10 or more trucks for 1999 and 2000)[a]											
Business[d]	U	U	1,080	1,378	1,375	1,205	1,275	1,332	1,360	3,016	3,026
Government[c]	U	U	297	632	646	2,221	2,215	2,223	2,010	2,400	2,408
Utilities	U	U	593	493	487	480	482	483	459	499	498
Other (police, taxi, etc.)	U	U	7	7	7	7	7	7	8	8	8
Rental trucks (not vans and SUVs)	U	U	304	308	363	202	197	179	181	213	248
Number of trucks in fleets of 4 to 24 (4 to 9 trucks for 1999 and 2000)[a]	U	U	U	U	U	2,100	2,270	2,420	3,311	1,652	1,662
Total trucks in fleets						**6,215**	**6,446**	**6,644**	**7,329**	**7,788**	**7,850**

KEY: SUV = sport utility vehicle; U = data are not available.

[a] The data source, Bobit Publishing, changed data collection categories for 1999 and 2000.

[b] Includes driver schools.

[c] Includes military vehicles and federal, state, county, and local government vehicles.

[d] Businesses with 25 or more Class 1-5 trucks including leasing, construction, plumbing, heating, food distribution, pest control, cable TV, etc. (Also applies to 1999 and 2000 data).

SOURCE: Bobit Publishing Co., *Automotive Fleet Fact Book,* 2001.

Table 1-13: Annual U.S. Motor Vehicle Production and Factory (Wholesale) Sales (Thousands)

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Production																	
Passenger cars	6,703	9,335	6,550	6,717	6,376	8,185	6,077	5,439	5,664	5,981	6,614	6,351	6,083	5,927	5,554	5,638	5,542
Commercial vehicles[a]	1,202	1,785	1,734	2,270	1,634	3,468	3,706	3,372	4,038	4,917	5,649	5,635	5,749	6,192	6,448	7,387	7,228
Total	**7,905**	**11,120**	**8,284**	**8,987**	**8,010**	**11,653**	**9,783**	**8,811**	**9,702**	**10,898**	**12,263**	**11,985**	**11,833**	**12,119**	**12,003**	**13,025**	**12,771**
Factory (wholesale) sales																	
Passenger cars	6,675	9,306	6,547	6,713	6,400	8,002	6,050	5,407	5,685	5,962	6,549	6,310	6,140	6,070	5,677	5,428	5,504
Commercial vehicles[a]	1,194	1,752	1,692	2,272	1,667	3,464	3,725	3,388	4,062	4,895	5,640	5,713	5,776	6,153	6,435	6,699	7,022
Total	**7,869**	**11,057**	**8,239**	**8,985**	**8,067**	**11,467**	**9,775**	**8,795**	**9,747**	**10,857**	**12,189**	**12,023**	**11,916**	**12,223**	**12,112**	**12,127**	**12,527**

[a] Includes trucks under 10,000 pounds gross vehicle weight rating (gvwr), such as compact and conventional pickups, sport utility vehicles, minivans, and vans, and trucks and buses over 10,000 pounds gvwr.

NOTES: Factory sales can be greater than production total because of sales from previous year's inventory.
Numbers may not add to totals due to rounding.

SOURCE: 1960-2000: Ward's, *Motor Vehicle Facts & Figures 2001* (Southfield, MI: 2001), p. 3.

Table 1-14: Retail[a] New Passenger Car Sales (Thousands)

	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
TOTAL new passenger car sales	**8,400**	**8,624**	**8,979**	**11,042**	**9,300**	**8,175**	**8,213**	**8,518**	**8,991**	**8,635**	**8,527**	**8,272**	**R8,142**	**8,698**	**8,847**
Domestic[b]	**7,119**	**7,053**	**6,581**	**8,205**	**6,897**	**6,137**	**6,277**	**6,742**	**7,255**	**7,129**	**7,254**	**6,917**	**R6,762**	**6,979**	**6,831**
Imports															
Japan	313	808	1,906	2,218	1,719	1,500	1,452	1,328	1,239	982	727	726	691	758	863
Germany	750	493	305	424	265	193	201	186	192	207	238	297	367	467	517
Other	217	271	187	196	419	345	284	262	303	317	308	332	R322	494	637
Total	**1,280**	**1,571**	**2,398**	**2,838**	**2,403**	**2,038**	**1,937**	**1,776**	**1,735**	**1,506**	**1,273**	**1,355**	**R1,380**	**1,719**	**2,016**

KEY: R = revised.

[a] Retail new car sales include both sales to individuals and to corporate fleets. It also includes leased cars.

[b] Includes cars produced in Canada and Mexico.

SOURCES: 1970: American Automobile Manufacturers Association, *Motor Vehicle Facts & Figures 1992* (Detroit, MI: 1992), p. 16.
1980: Ibid., *Motor Vehicle Facts & Figures 1997* (Detroit, MI: 1997), p. 19.
1975, 1985-2000: Ward's, *Motor Vehicle Facts & Figures 2001* (Southfield, MI: 2001), p. 21.

Table 1-15: New and Used Passenger Car Sales and Leases (Thousands)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
TOTAL new and used passenger car sales	**46,830**	**45,465**	**R45,164**	**R46,575**	**R49,131**	**R50,393**	**R49,327**	**R49,512**	**R48,982**	**R49,438**	**50,466**
New passenger car sales[a]	**9,300**	**8,175**	**R8,214**	**8,518**	**R8,990**	**8,635**	**8,526**	**8,272**	**R8,142**	**R8,698**	**8,846**
Used passenger car sales[b]	**37,530**	**37,290**	**36,950**	**38,057**	**40,141**	**41,758**	**R40,801**	**R41,240**	**R40,840**	**R40,740**	**41,620**
Value of transactions ($ billions)	219	230	247	R257	R292	R325	R333	R337	335	R353	363
Average price (current $)	5,830	6,157	R6,693	R6,750	R7,280	R7,776	R8,162	R8,164	R8,213	R8,674	8,715
New passenger car leases[c]	**534**	**667**	**882**	**1,197**	**1,715**	**1,795**	**1,806**	**2,062**	**2,174**	**2,271**	**2,272**

KEY: R = revised.

[a] Includes leased cars.

[b] Used car sales include sales from franchised dealers, independent dealers, and casual sales.

[c] Consumer leases only.

SOURCES:

New passenger car sales:

Ward's, *Motor Vehicle Facts & Figures, 2001* (Southfield, MI: 2001), p.15.

Used passenger car sales:

ADT Automotive, *2001 Used Car Market Report* (Nashville, TN: 2000), p. 5.

Leased passenger cars:

CNW Marketing/Research, personal communication, May 31, 2000, Aug. 13, 2001.

Table 1-16: Retail Sales of New Cars by Sector (Thousands)

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	R1999	2000
Total	**6,641**	**9,333**	**8,402**	**8,538**	**8,982**	**10,978**	**9,300**	**8,175**	**8,214**	**8,518**	**8,990**	**8,688**	**8,499**	**8,232**	**8,142**	**8,697**	**8,852**
Sales of new cars																	
Consumer	5,645	7,103	6,252	5,907	6,100	7,092	5,677	4,424	4,566	4,646	4,610	4,341	4,052	3,875	3,988	4,397	4,694
Business	930	2,140	2,056	2,508	2,758	3,754	3,477	3,648	3,529	3,757	4,255	4,203	4,313	4,246	R3,984	4,119	3,989
Government	66	89	94	123	124	132	147	103	119	114	124	144	134	112	R170	181	169
Percentage of total sales																	
Consumer	85.0	76.1	74.4	69.2	67.9	64.6	61.0	54.1	55.6	54.5	51.3	50.0	47.7	47.1	49.0	50.6	53.0
Business	14.0	22.9	24.5	29.4	30.7	34.2	37.4	44.6	43.0	44.1	47.3	48.4	50.7	51.6	R48.9	47.4	45.1

KEY: R = revised.

NOTES: Includes imported cars, but not vans, trucks, or sport utility vehicles.
Numbers may not add to totals due to rounding.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Wealth Division, unpublished data.

Table 1-17: Period Sales, Market Shares, and Sales-Weighted Fuel Economies of New Domestic and Imported Automobiles, Selected Sales Periods[a] (Thousands)

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Sales													
Total Units	9,095	10,969	9,224	8,380	8,107	8,388	8,916	8,725	8,652	8,261	8,071	8,646	8,978
Minicompact	428	52	77	96	108	84	57	45	34	40	12	13	19
Subcompact	3,441	2,382	2,030	2,256	2,074	1,945	2,015	1,518	1,315	1,510	1,491	1,622	1,789
Compact	599	3,526	3,156	2,425	2,451	2,655	3,077	3,290	R3,493	2,937	2,309	2,367	2,398
Midsize	3,073	3,118	2,512	2,306	2,250	2,446	2,360	2,499	2,488	2,531	3,107	3,359	3,352
Large	1,336	1,516	1,279	1,161	1,141	1,187	1,340	1,321	1,259	1,162	1,050	1,181	1,297
Two-seater	216	374	170	135	83	70	67	53	62	81	101	103	122
Market share, %													
Minicompact	4.7	0.5	0.8	1.1	1.3	1.0	0.6	0.5	0.4	0.5	0.2	0.1	0.2
Subcompact	37.8	21.7	22.0	26.9	25.6	23.2	22.6	17.4	15.2	18.3	18.5	18.8	19.9
Compact	6.6	32.1	34.2	28.9	30.2	31.7	34.5	37.7	40.4	35.6	28.6	27.4	26.7
Midsize	33.8	28.4	27.2	27.5	27.7	29.2	26.5	28.6	28.8	30.6	38.5	38.9	37.3
Large	14.7	13.8	13.9	13.9	14.1	14.2	15.0	15.1	14.6	R14.1	13.0	13.7	14.4
Two-seater	2.4	3.4	1.8	1.6	1.0	0.8	0.8	0.6	0.7	1.0	1.3	1.2	1.4
Fuel economy, mpg													
Fleet	23.2	27.0	27.6	27.7	27.7	27.8	27.8	28.0	28.3	28.3	28.3	28.0	28.2
Minicompact	29.4	32.7	26.4	29.3	30.6	29.9	27.8	27.0	27.2	26.3	23.9	24.8	25.6
Subcompact	27.3	30.1	31.3	31.6	31.8	31.9	31.3	31.7	32.1	32.6	31.3	31.0	31.1
Compact	22.3	29.6	28.9	28.8	28.7	29.3	29.8	30.2	30.4	30.0	30.8	30.2	30.4
Midsize	21.3	24.9	25.9	25.9	25.8	25.7	25.6	25.9	26.4	26.3	26.9	R27.0	26.8
Large	19.3	22.3	23.5	23.3	23.7	24.0	24.2	24.1	24.2	24.5	24.6	24.4	25.3
Two-seater	21.0	27.6	28.0	27.3	25.9	24.8	23.9	24.7	25.4	26.3	25.4	R25.2	25.8

KEY: mpg = miles per gallon; R = revised.

[a] These figures represent only those sales that could be matched to corresponding U.S. Environmental Protection Agency fuel economy values.

NOTE: Numbers and percents may not add to totals due to rounding.

SOURCE: Light-Duty Vehicle MPG and Market Shares System Database, as cited in Oak Ridge National Laboratory, *Transportation Energy Data Book,* Edition 20, ORNL-6941 (Oak Ridge, TN: 2000), table 7.5, p. 7-6, and personal communication, Oct. 11, 2001.

Table 1-18: Period Sales, Market Shares, and Sales-Weighted Fuel Economies of New Domestic and Imported Light Trucks, Selected Sales Periods[a] (Thousands)

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Sales													
Total units	2,217	4,235	4,515	4,048	4,392	5,056	5,724	5,934	6,237	6,527	7,138	8,002	8,307
Small pickups	516	864	R1,136	R1,004	R1,001	R1,093	R1,160	R1,068	R1,010	R978	R891	R1,111	1,072
Large pickups	1,115	1,691	R1,116	R934	R1,038	R1,117	R1,405	R1,473	R1,607	R1,594	R1,947	R2,022	1,969
Small vans	14	438	R1,012	R948	R1,038	R1,203	R1,350	R1,331	R1,307	R1,298	R1,273	R1,372	1,272
Large vans	328	536	R319	R248	R281	R315	R321	R328	R293	R304	R331	R364	369
Small SUV[R]	52	442	402	349	382	416	433	510	580	350	487	662	756
Medium SUV[R]	152	187	434	493	582	785	916	1,077	1,272	1,448	1,586	1,758	2,167
Large SUV[R]	40	78	94	72	71	126	140	149	168	555	622	713	702
Market share, %													
Small pickups	23.3	20.4	R25.2	R24.8	R22.8	R21.6	R20.3	R18.0	R16.2	R15.0	R12.5	R13.9	12.9
Large pickups	50.3	39.9	R24.7	R23.1	R23.6	R22.1	R24.5	R24.8	R25.8	R24.4	R27.3	R25.3	23.7
Small vans	0.6	10.3	R22.4	R23.4	R23.6	R23.8	R23.6	R22.4	R21.0	R19.9	R17.8	R17.1	15.3
Large vans	14.8	12.7	R7.1	R6.1	R6.4	R6.2	R5.6	R5.5	R4.7	R4.7	R4.6	R4.5	4.4
Small SUV[R]	2.3	10.4	8.9	8.6	8.7	8.2	7.6	8.6	9.3	5.4	6.8	8.3	9.1
Medium SUV[R]	6.9	4.4	9.6	12.2	13.3	15.5	16.0	18.1	20.4	22.2	22.2	22.0	26.1
Large SUV[R]	1.8	1.8	2.1	1.8	1.6	2.5	2.4	2.5	2.7	8.5	8.7	8.9	8.5
Fuel economy, mpg													
Fleet	18.1	20.4	20.5	20.6	20.4	20.5	20.4	20.2	20.4	20.1	20.3	R 20.0	20.4
Small pickups	25.5	26.8	R24.5	R 24.6	R 23.7	R 23.3	R 24.1	R 24.4	R 24.8	R 24.1	R 24.1	R 22.6	22.0
Large pickups	17.0	19.0	R 17.5	R 17.5	R 17.8	R 18.0	R 18.5	R 17.8	R 17.9	R 18.5	R 18.3	R 18.1	18.7
Small vans	19.6	23.9	R 22.3	R 22.2	R 21.9	R 22.4	R 21.6	R 22.4	R 22.3	R 22.5	R 23.0	R 22.8	23.0
Large vans	16.3	16.4	R 17.1	17.4	R 17.2	R 17.5	R 17.5	R 17.2	R 17.3	R 18.0	18.2	R 17.7	18.2
Small SUV[R]	17.7	22.1	22.5	21.8	21.7	21.9	21.8	22.0	22.6	23.3	23.7	23.6	23.8
Medium SUV[R]	14.9	17.2	19.7	19.9	19.8	19.9	19.5	19.2	19.6	19.1	20.0	20.0	20.4
Large SUV[R]	13.7	17.1	16.5	16.4	15.8	16.4	16.4	16.1	17.3	17.5	17.4	17.1	17.5

KEY: mpg = miles per gallon; R = revised; SUV = sport utility vehicle.

[a] These figures represent only those sales that could be matched to corresponding U.S. Environmental Protection Agency fuel economy values.

NOTES: Numbers and percents may not add to totals due to rounding.

Fleet sales total cannot be compared with truck sales in table 1-10 for the following reasons: 1) this table includes both domestic and imported trucks, whereas the numbers in table 1-10 are for domestic trucks only; and 2) this table covers only light trucks, whereas the numbers in table 1-10 include heavy trucks.

SOURCE: Light-Duty Vehicle MPG and Market Shares System Database, as cited in Oak Ridge National Laboratory, T*ransportation Energy Data Book,* Edition 20, ORNL-6941 (Oak Ridge, TN: 2000), table 7.6, p. 7-7, and personal communication, Oct. 11, 2001.

Table 1-19: World Motor Vehicle Production, Selected Countries (Thousands)

	Passenger cars[a]										
	1961	**1971**	**1981**	**1991**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
TOTAL world	**11,391**	**26,453**	**27,407**	**35,287**	**R35,730**	**36,111**	**37,318**	**38,474**	**37,286**	**38,816**	**40,732**
U.S. % of world	**48%**	**32%**	**23%**	**15%**	**19%**	**18%**	**16%**	**15%**	**15%**	**15%**	**14%**
Argentina	78	193	139	114	338	227	269	366	353	225	239
Australia	182	393	352	269	323	314	303	320	350	294	324
Austria	8	1	7	14	45	59	97	98	91	124	116
Belgium	N	279	216	253	409	386	368	356	319	218	912
Brazil	98	342	406	705	1,248	1,297	1,459	1,680	1,244	1,102	1,348
Canada	328	1,083	803	1,060	1,214	1,337	1,279	1,374	1,122	1,626	1,551
China	N	N	N	81	250	321	382	482	507	570	620
Czech Republic[c]	59	149	181	173	174	208	263	321	368	348	428
France	988	2,694	2,612	3,188	3,175	3,051	3,148	2,259	2,603	2,676	2,883
Germany	1,802	3,829	3,758	4,677	4,094	4,360	4,540	4,678	5,348	5,310	4,803
India	22	42	42	179	237	330	396	410	384	519	514
Italy	694	1,701	1,257	1,633	1,341	1,422	1,318	1,563	1,402	1,410	1,422
Japan	250	3,718	6,974	9,753	7,802	7,611	7,864	8,491	8,056	8,100	8,363
South Korea	N	N	69	1,158	1,806	2,003	2,265	2,308	1,625	2,362	2,602
Malaysia	N	N	N	102	137	164	176	280	126	200	280
Mexico	N	154	355	720	857	699	798	855	953	994	1,130
Netherlands	13	78	78	85	92	100	145	197	243	262	215
Poland	14	86	248	168	349	347	353	295	460	651	533
Portugal	N	N	N	N	38	41	119	186	181	187	191
Romania	N	N	N	84	85	71	76	108	104	88	58
Russia	149	518	1,324	1,308	796	838	868	982	U	946	966
Spain	55	453	855	1,943	1,974	2,131	2,213	2,342	2,217	2,029	2,445
Sweden	110	287	258	269	353	388	368	376	368	385	260
Taiwan	N	N	N	266	291	282	265	268	293	255	265
Turkey	N	13	25	196	213	233	208	243	U	U	297
United Kingdom	1,004	1,742	955	1,237	1,467	1,532	1,686	1,698	1,748	1,787	1,629
United States	5,522	8,584	6,253	5,439	6,614	6,351	6,083	5,927	5,554	5,638	5,542
Yugoslavia, Federal Republic of	15	114	240	213	8	8	9	11	U	U	U

continued

Table 1-19 *continued*

	Commercial vehicles[b]										
	1961	**1971**	**1981**	**1991**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
TOTAL world	**3,809**	**6,948**	**9,729**	**11,996**	**13,952**	**13,926**	**14,147**	**14,988**	**14,811**	**16,132**	**16,796**
U.S. % of world	**30%**	**30%**	**17%**	**28%**	**40%**	**40%**	**40%**	**41%**	**44%**	**46%**	**43%**
Argentina	58	60	33	25	70	59	44	80	105	80	101
Australia	49	77	40	15	31	17	19	29	34	17	25
Austria	5	6	8	6	3	9	9	10	12	16	25
Belgium	1	17	41	84	70	82	69	74	87	74	121
Brazil	47	174	374	255	334	332	346	388	329	242	323
Canada	63	277	520	829	1,106	1,071	1,118	1,198	1,050	1,430	1,411
China	N	N	N	628	1,103	1,114	1,084	1,096	1,121	1,235	1,389
Czech Republic[c]	17	28	49	29	6	8	9	47	42	27	27
France	217	316	408	423	383	424	443	322	351	357	469
Germany	411	312	358	358	262	307	303	345	379	378	395
India	32	47	107	176	238	306	366	336	129	261	282
Italy	65	116	176	245	194	245	227	254	290	291	316
Japan	789	2,093	4,206	3,492	2,752	2,585	2,482	2,484	1,994	1,805	1,781
South Korea	N	N	65	340	506	523	548	510	329	471	513
Malaysia	N	N	N	0	0	0	0	0	7	5	15
Mexico	N	57	242	269	266	236	422	503	500	540	792
Netherlands	6	13	12	26	23	32	19	20	28	25	52
Poland	22	60	60	25	16	34	48	27	39	44	24
Portugal	N	N	N	26	87	16	13	81	90	65	56
Romania	N	N	N	10	5	22	23	21	23	19	14
Russia	406	612	874	744	206	156	136	192	U	226	237
Spain	20	79	132	139	168	203	199	220	609	644	587
Sweden	22	30	55	75	82	102	95	104	114	109	36
Taiwan	N	N	N	116	132	124	101	113	112	95	100
Turkey	N	12	22	46	31	49	69	102	U	U	133
United Kingdom	443	456	230	217	228	233	238	238	233	186	189
United States	1,131	2,088	1,690	3,372	5,649	5,635	5,716	6,192	6,452	7,387	7,228
Yugoslavia, Federal Republic of	5	18	27	26	2	2	1	2	U	U	U

continued

Table 1-19 *continued*

	Total										
	1961	**1971**	**1981**	**1991**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
TOTAL world	**15,200**	**33,401**	**37,136**	**47,283**	**49,681**	**50,037**	**51,465**	**53,463**	**52,098**	**54,948**	**57,528**
U.S. % of world	**44%**	**32%**	**21%**	**19%**	**25%**	**24%**	**23%**	**23%**	**23%**	**24%**	**22%**
Argentina	136	253	172	139	409	286	313	446	458	305	340
Australia	231	470	392	284	354	331	322	349	384	311	348
Austria	13	7	15	20	48	68	106	108	103	139	141
Belgium	1	296	257	337	479	468	437	430	406	291	1,033
Brazil	145	516	780	960	1,582	1,629	1,805	2,067	1,573	1,344	1,671
Canada	391	1,360	1,323	1,889	2,320	2,408	2,397	2,571	2,173	3,057	2,962
China	N	N	N	709	1,353	1,435	1,466	1,578	1,628	1,805	2,009
Czech Republic[c]	76	177	230	202	180	216	272	369	411	376	455
France	1,205	3,010	3,020	3,611	3,558	3,475	3,591	2,581	2,954	3,033	3,352
Germany	2,213	4,141	4,116	5,035	4,356	4,667	4,843	5,023	5,727	5,688	5,198
India	54	89	149	355	475	636	762	746	513	780	796
Italy	759	1,817	1,433	1,878	1,534	1,667	1,545	1,817	1,693	1,701	1,738
Japan	1,039	5,811	11,180	13,245	10,554	10,196	10,346	10,975	10,050	9,905	10,145
South Korea	N	N	134	1,498	2,312	2,526	2,813	2,818	1,954	2,832	3,115
Malaysia	N	N	N	102	137	164	176	280	134	205	295
Mexico	N	211	597	989	1,123	935	1,220	1,358	1,453	1,534	1,923
Netherlands	19	91	90	111	115	132	164	218	271	287	267
Poland	36	146	308	193	365	381	401	322	499	695	556
Portugal	N	N	N	26	125	57	132	267	271	252	247
Romania	N	N	N	94	90	93	99	129	127	107	72
Russia	555	1,130	2,198	2,052	1,002	994	1,004	1,174	U	1,172	1,203
Spain	75	532	987	2,082	2,142	2,334	2,412	2,562	2,826	2,672	3,033
Sweden	132	317	313	344	435	490	463	480	483	494	296
Taiwan	N	N	N	382	423	406	366	381	405	350	365
Turkey	N	25	47	242	244	282	277	344	U	U	431
United Kingdom	1,447	2,198	1,185	1,454	1,695	1,765	1,924	1,936	1,981	1,973	1,817
United States	6,653	10,672	7,943	8,811	12,263	11,986	11,799	12,119	12,006	13,025	12,771
Yugoslavia, Federal Republic of	20	132	267	239	9	10	10	14	U	U	U

KEY: N = data do not exist; U = data are not available.

[a] Does not include minivans, pickups, and sport utility vehicles.
[b] Includes all trucks and buses. Light trucks, such as pickups, sport utility vehicles, and minivans are included under commercial vehicles.
[c] Formerly Czechoslovakia.

NOTES: Prior to 2000, the country of manufacture was recognized as the producing country. To conform with current OICA practices, starting in 2000, the country of final assembly was recognized as the producing country. This explains the sudden change in trends across some countries from 1999 to 2000.
Numbers may not add to total due to rounding.

SOURCE: Ward's, *Motor Vehicle Facts & Figures 2001* (Southfield, MI: 2001), p. 12 and similar tables in previous editions.

Table 1-20: Number and Size of the U.S. Flag Merchant Fleet and Its Share of the World Fleet
(Oceangoing ships of 1,000 gross tons and over)

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
World fleet	**17,317**	**18,329**	**19,980**	**22,872**	**24,867**	**25,555**	**23,596**	**23,943**	**23,753**	**24,331**	**25,092**	**25,608**	**26,858**	**27,557**	**27,825**	**28,259**	**28,318**
U.S. fleet	**2,926**	**2,376**	**1,579**	**857**	**864**	**737**	**636**	**619**	**603**	**565**	**543**	**509**	**495**	**477**	**470**	**463**	**454**
U.S. share of the world fleet	**17%**	**13%**	**8%**	**4%**	**3%**	**3%**	**3%**	**3%**	**3%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**
Freighters, Total	**2,138**	**1,747**	**1,076**	**511**	**471**	**417**	**367**	**359**	**349**	**322**	**308**	**295**	**292**	**288**	**289**	**284**	**286**
DWT (thousands)	**21,877**	**18,127**	**11,733**	**7,051**	**6,885**	**7,353**	**7,265**	**7,156**	**7,211**	**7,040**	**6,866**	**6,517**	**6,419**	**6,458**	**6,732**	**6,696**	**6,680**
General cargo[a]	N	N	N	356	259	209	166	165	182	169	152	142	146	142	140	137	136
DWT (thousands)	N	N	N	4,640	3,329	2,980	2,605	2,592	2,973	2,913	2,677	2,472	2,467	2,420	2,400	2,404	2,362
Containership	N	N	N	109	121	104	92	92	83	87	86	81	83	85	91	89	90
DWT (thousands)	N	N	N	1,773	2,289	2,651	2,856	2,856	2,722	2,812	2,802	2,600	2,639	2,743	3,096	3,056	3,058
Partial containerships	N	N	N	37	68	63	59	52	30	3	3	3	1	1	N	N	N
DWT (thousands)	N	N	N	510	940	904	836	741	456	57	57	57	17	17	N	N	N
RO/RO	N	N	N	9	23	41	50	50	54	63	67	69	62	60	58	58	60
DWT (thousands)	N	N	N	128	327	818	968	967	1,060	1,258	1,330	1,388	1,296	1,278	1,236	1,236	1,260
Tankers, Total	**422**	**341**	**294**	**267**	**308**	**258**	**233**	**226**	**220**	**210**	**200**	**181**	**173**	**161**	**154**	**154**	**142**
DWT (thousands)	**7,815**	**7,561**	**7,739**	**9,711**	**16,152**	**15,534**	**15,641**	**14,993**	**14,180**	**13,048**	**[R]11,945**	**11,028**	**10,378**	**9,696**	**9,289**	**9,373**	**8,447**
Petroleum/chemical[b] ships	N	N	N	N	N	244	219	212	206	196	186	167	159	148	145	146	142
DWT (thousands)	N	N	N	N	N	14,574	14,681	14,033	13,279	12,143	11,040	10,123	9,473	8,857	8,737	8,845	8,447
Liquefied petroleum/ natural gas ships	N	N	N	N	N	14	14	14	14	14	14	14	14	13	9	8	N
DWT (thousands)	N	N	N	N	N	960	960	960	901	905	905	905	905	839	552	528	N
Combination/ passenger and cargo, Total	**309**	**227**	**171**	**60**	**65**	**37**	**10**	**10**	**11**	**12**	**13**	**13**	**15**	**14**	**12**	**11**	**11**
DWT (thousands)	**2,070**	**1,488**	**1,107**	**388**	**446**	**299**	**91**	**92**	**97**	**104**	**115**	**115**	**139**	**136**	**116**	**99**	**99**
Bulk carriers, Total	**57**	**61**	**38**	**19**	**20**	**25**	**26**	**24**	**23**	**21**	**22**	**20**	**15**	**14**	**15**	**14**	**15**
DWT (thousands)	**805**	**1,107**	**767**	**544**	**607**	**1,152**	**1,270**	**1,014**	**991**	**949**	**1,042**	**925**	**575**	**321**	**604**	**579**	**604**

KEY: DWT = deadweight tons; N = data do not exist; RO/RO = roll-on/roll-off vessels.

[a] Includes barge carriers.

[b] Includes integrated tug/barges.

NOTES: Excludes nonmerchant type and/or U.S. Navy-owned vessels currently in the National Defense Reserve Fleet.

Excludes ships operating exclusively on the Great Lakes and inland waterways and special types such as: channel ships, icebreakers, cable ships, and merchant ships owned by military forces. All data are as of December 31 of year shown.

SOURCES: 1960-1997: U.S. Department of Transportation, Maritime Administration, *Merchant Fleets of the World* (Washington, DC: Annual issues), and unpublished revisions.
1998-2000: U.S. Department of Transportation, Maritime Administration, personal communication, Oct. 24, 2001.

Table 1-21: U.S. Airport Runway Pavement Conditions

	1986	1990	1993	1997	1999	2000	2001
NPIAS[a] airports, total	**3,243**	**3,285**	**3,294**	**3,331**	**3,344**	**3,361**	**3,354**
Condition (%)							
Good	61	61	68	72	72	73	73
Fair	28	29	25	23	23	22	22
Poor	11	10	7	5	5	5	5
Commercial service airports[b], total	**550**	**568**	**554**	**566**	**547**	**546**	**546**
Condition (%)							
Good	78	78	79	79	78	79	79
Fair	15	17	18	19	20	19	19
Poor	7	5	3	2	[R]2	2	2

KEY: NPIAS = National Plan of Integrated Airport Systems.

[a] The U.S. Department of Transportation, Federal Aviation Administration's (FAA's) National Plan of Integrated Airport Systems is composed of all commercial service airports, all reliever airports, and selected general aviation airports. It does not include over 1,000 publicly owned public-use landing areas, privately owned public-use airports, and other civil landing areas not open to the general public. NPIAS airports account for 100% of all enplanements and serve 91.5% of all aircraft (based on an estimated fleet of 200,000 aircraft). In 1997, there were 14,961 non-NPIAS airports. See table 1-2 for more detail on airports.

[b] Commercial service airports are defined as public airports receiving scheduled passenger service, and having at least 2,500 enplaned passengers per year.

NOTES: Data are as of January 1 of each year. Runway pavement condition is classified by the FAA as follows:

Good: All cracks and joints are sealed.

Fair: Mild surface cracking, unsealed joints, and slab edge spalling.

Poor: Large open cracks, surface and edge spalling, vegetation growing through cracks and joints.

SOURCES:

Condition (%):

1986-90: U.S. Department of Transportation, Federal Aviation Administration, *National Plan of Integrated Airport S*ystems (Washington DC: 1991).

1993: Ibid., *National Plan of Integrated Airport Systems* (Washington DC: 1995).

1997, 1999-2001: Ibid., Office of Airport Planning and Programming, National Planning Division, personal communication, 1997, 2000, Aug. 20, 2001, May 27, 2002.

Total number of airports:

1986-2001: U.S. Department of Transportation, Federal Aviation Administration, Office of Airport Planning and Programming, National Planning Division, personal communication, June 23, 2000, Aug. 20, 2001, May 27, 2002.

Table 1-22: Median Age of Automobiles and Trucks in Operation in the U.S.

	Automobiles	Trucks
1970	4.9	5.9
1975	5.4	5.8
1980	6.0	6.3
1985	6.9	7.6
1990	6.5	6.5
1991	6.7	6.8
1992	7.0	7.2
1993	7.3	7.5
1994	7.5	7.5
1995	7.7	7.6
1996	7.9	7.7
1997	8.1	7.8
1998	8.3	7.6
1999	8.3	7.2
2000	8.3	6.9

KEY: N = data do not exist.

NOTE: The National Personal Transportation Survey conducted by the U.S. Department of Transportation, Federal Highway Administration, estimates the mean age of automobiles, trucks, and vans for several years:

	1969	1977	1983	1990	1995
Automobiles	5.1	5.5	6.7	7.6	8.2
Trucks	N	6.4	7.9	9.0	8.3 (inc. vans)

SOURCE: The R.L. Polk Co., personal communication, Aug. 9, 2001.

Table 1-23: Condition of U.S. Roadways by Functional System

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Rural											
Interstates											
Miles reported	**33,547**	**33,677**	**33,027**	**29,089**	**31,502**	**31,254**	**31,312**	**31,431**	**30,498**	**32,820**	**32,888**
Poor (%)	8.7	7.6	5.2	7.0	6.5	6.3	3.9	3.6	4.1	2.4	2.1
Mediocre (%)	[a]	[a]	14.1	27.7	26.5	20.7	19.1	19.1	16.5	14.0	12.2
Fair (%)	31.9	31.7	17.4	20.9	23.9	22.3	21.7	20.7	17.8	18.1	16.9
Good (%)	[a]	[a]	27.6	36.1	33.2	36.9	38.8	41.0	42.6	44.0	44.8
Very good (%)	59.5	60.7	35.6	8.3	9.9	13.9	16.6	15.7	19.0	21.5	23.9
Unpaved (%)	N	N	N	N	N	N	N	N	N	N	N
Miles not reported	**N**	**N**	**N**	**3,563**	**955**	**1,326**	**1,508**	**1,382**	**2,313**	**153**	**162**
Other principal arterials											
Miles reported	**83,802**	**85,729**	**94,798**	**78,296**	**89,506**	**89,265**	**92,103**	**92,170**	**93,333**	**97,247**	**97,284**
Poor (%)	3.4	3.6	3.3	2.9	2.4	4.4	1.4	1.6	1.4	0.9	0.8
Mediocre (%)	[a]	[a]	5.9	9.2	8.2	7.6	5.8	4.9	4.6	3.7	3.2
Fair (%)	42.6	44.5	34.6	54.8	57.4	51.1	49.1	47.7	43.3	41.5	38.7
Good (%)	[a]	[a]	28.5	26.7	26.6	27.9	34.4	[R]37.2	38.3	40.5	42.9
Very good (%)	53.8	51.9	27.6	6.4	5.4	9.0	9.3	8.6	12.3	13.5	14.4
Unpaved (%)	N	N	N	N	N	N	N	N	N	N	N
Miles not reported	**N**	**N**	**N**	**17,905**	**7,489**	**8,683**	**6,028**	**6,083**	**5,524**	**1,587**	**1,625**
Minor arterials											
Miles reported	**144,735**	**142,866**	**137,637**	**134,837**	**124,877**	**121,443**	**126,381**	**126,525**	**130,591**	**135,192**	**136,092**
Poor (%)	4.6	4.3	3.9	3.9	3.5	3.7	2.3	2.3	1.9	1.7	1.7
Mediocre (%)	[a]	[a]	7.1	9.1	10.5	9.0	8.2	6.7	6.0	5.2	5.3
Fair (%)	48.2	47.3	36.4	53.5	57.9	54.7	50.7	50.4	47.2	47.3	46.2
Good (%)	[a]	[a]	25.3	25.0	23.6	23.9	31.0	33.6	34.3	34.4	35.6
Very good (%)	47.2	48.4	26.8	8.5	4.5	8.7	7.7	7.0	10.6	11.4	11.2
Unpaved (%)	–	–	N	N	N	N	N	N	N	N	N
Miles not reported	**N**	**N**	**N**	**12,740**	**13,294**	**15,708**	**[R]10,978**	**10,978**	**6,664**	**1,968**	**1,227**
Major collectors											
Miles reported	**436,365**	**436,737**	**434,175**	**432,223**	**431,111**	**431,712**	**432,117**	**386,122**	**[R]171,134**	**163,544**	**388,485**
Poor (%)	8.9	7.7	7.8	6.8	6.5	6.5	6.7	7.8	[R]8.8	9.3	8.5
Mediocre (%)	[a]	[a]	11.0	12.4	11.3	11.4	10.3	12.3	[R]13.0	12.1	12.7
Fair (%)	43.8	45.2	32.3	37.7	33.5	30.8	[R]34.4	37.6	[R]33.5	33.2	43.7
Good (%)	[a]	[a]	17.7	16.3	16.1	17.4	20.0	23.0	[R]21.3	20.9	22
Very good (%)	36.2	36.1	20.4	15.9	21.9	23.7	18.4	19.3	[R]23.4	24.5	13.2
Unpaved (%)	11.1	11.0	10.7	10.9	10.7	10.2	10.1	N	N	N	N
Miles not reported[b]	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**2,402**	**[R]217,566**	**U**	**U**

continued

Table 1-23 *continued*

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Urban											
Interstates											
Miles reported	**11,527**	**11,603**	**12,466**	**10,738**	**12,338**	**12,307**	**12,430**	**12,477**	**12,231**	**13,109**	**13,139**
Poor (%)	8.6	7.7	7.1	10.6	13.0	10.4	8.6	9.0	9.4	7.3	6.5
Mediocre (%)	[a]	[a]	13.2	30.9	29.9	26.8	28.3	27.0	25.5	23.1	21.7
Fair (%)	32.2	32.3	17.0	23.6	24.2	23.8	24.7	24.4	21.8	22.6	21.4
Good (%)	[a]	[a]	28.0	28.3	26.7	27.5	30.7	32.9	32.0	34.9	37.1
Very good (%)	59.1	60.0	34.7	6.5	6.2	11.4	7.6	6.7	11.4	12.0	13.3
Unpaved (%)	N	N	N	N	N	N	N	N	N	N	N
Miles not reported	**N**	**N**	**N**	**2,140**	**788**	**857**	**787**	**771**	**1,040**	**230**	**226**
Other freeways and expressways											
Miles reported	**7,670**	**7,714**	**8,465**	**7,011**	**7,618**	**7,804**	**8,410**	**8,480**	**8,772**	**8,860**	**8,794**
Poor (%)	2.2	2.3	2.6	3.8	5.3	4.8	3.4	3.3	3.2	2.6	2.8
Mediocre (%)	[a]	[a]	5.9	9.4	12.7	9.8	8.7	8.7	8.7	8.0	8.1
Fair (%)	43.9	44.2	32.4	60.6	58.1	54.7	54.7	58.5	54.3	53.6	50.6
Good (%)	[a]	[a]	28.1	22.7	20.9	20.4	26.3	25.2	27.1	30.0	31.6
Very good (%)	53.9	53.5	31.0	3.5	2.9	10.3	6.8	4.2	6.6	6.8	6.8
Unpaved (%)	N	N	N	N	N	N	N	N	N	N	N
Miles not reported	**N**	**N**	**N**	**1,846**	**1,377**	**1,166**	**[R]617**	**579**	**397**	**281**	**355**
Other principal arterials											
Miles reported	**51,987**	**52,349**	**52,165**	**30,337**	**38,598**	**41,444**	**44,498**	**45,009**	**44,886**	**48,045**	**47,797**
Poor (%)	5.9	6.6	6.8	9.2	12.5	12.4	11.8	12.1	12.9	12.5	13.2
Mediocre (%)	[a]	[a]	11.5	13.3	16.3	14.7	14.1	14.6	18.5	18.1	16.8
Fair (%)	49.0	49.1	34.8	55.0	50.8	47.2	48.9	49.5	45.3	45.2	45.1
Good (%)	[a]	[a]	21.4	19.3	16.6	15.9	17.5	17.8	17.6	18.8	19.4
Very good (%)	45.1	44.3	25.3	3.3	3.8	9.7	7.7	6.0	5.8	5.4	5.4
Unpaved (%)	N	N	N	N	N	N	N	N	N	N	N
Miles not reported	**N**	**N**	**N**	**22,498**	**14,492**	**11,352**	**8,485**	**8,209**	**8,246**	**5,154**	**5,518**
Minor arterials											
Miles reported	**74,656**	**74,979**	**80,368**	**86,819**	**87,852**	**88,510**	**89,020**	**88,484**	**[R]45,275**	**43,481**	**88,339**
Poor (%)	8.9	7.4	7.9	7.9	6.7	6.7	6.9	7.2	[R]5.7	5.8	10.0
Mediocre (%)	[a]	[a]	14.3	13.8	12.3	13.6	13.0	13.0	12.2	11.7	16.0
Fair (%)	48.5	49.9	34.1	40.2	38.1	36.9	37.9	37.9	[R]36.0	35.3	39.8
Good (%)	[a]	[a]	19.2	18.4	20.5	20.4	20.7	21.4	[R]22.1	20.5	16.9
Very good (%)	42.1	42.1	24.0	19.4	22.1	22.1	21.1	20.6	[R]24.0	26.8	17.3
Unpaved (%)	0.5	0.6	0.5	0.4	0.3	0.3	0.4	N	N	N	N
Miles not reported[b]	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**374**	**[R]43,435**	**U**	**U**
Collectors											
Miles reported	**78,248**	**77,097**	**82,657**	**84,856**	**86,098**	**87,331**	**87,790**	**86,666**	**[R]53,806**	**52,002**	**86,026**
Poor (%)	16.5	11.2	10.5	10.6	9.8	9.7	9.7	10.6	[R]8.1	9.0	14.7
Mediocre (%)	[a]	[a]	16.9	16.8	16.2	16.8	16.6	16.0	[R]12.8	13.0	17.4
Fair (%)	50.4	53.5	35.2	40.0	40.0	39.0	39.2	39.0	[R]39.4	37.4	35.7
Good (%)	[a]	[a]	17.3	16.1	17.0	17.2	18.2	18.4	[R]18.8	17.2	14.2
Very good (%)	31.7	34.2	19.1	15.5	16.0	16.6	15.4	15.9	[R]20.9	23.4	18
Unpaved (%)	1.3	1.1	1.1	1.0	0.9	0.8	0.9	N	N	N	N
Miles not reported[b]	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**663**	**[R]32,921**	**U**	**U**

KEY: N = data do not exist; R = revised; U = data are not available; – = value too small to report.

[a] Included in row below.

[b] The significant increase in miles not reported can be attributed to the fact that many states are electing to report pavement conditions by the more objective International Roughness Indicator (IRI) rather than by the Present Serviceability Rating (PSR), which has traditionally been used to determine pavement conditions for these systems.

NOTES: Because of the transition to a new indicator for pavement condition beginning with U.S. Department of Transportation, Federal Highway Administration (FHWA) data published in 1993, comparisons between pre-1993 data and 1993 and later data are difficult. Thus, trend comparisons should be made with care. For additional information, the reader is referred to the accuracy profile for this table in the appendix. Total mileage in this table will not match that in table 1-4 because of a change in the method of creating mileage-based tables derived from the Highway Performance Monitoring System, beginning with the 1997 issue of FHWA's *Highway Statistics.*
Data are for the 50 states and the District of Columbia.
Percents may not add to totals due to rounding.

SOURCES: 1990-92: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics* (Washington, DC: Annual issues), table HM-63.
1993-98, 2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table HM-63 for rural major collector, urban minor arterial, and urban collector, and table HM-64 for all other categories.
1999: Ibid., personal communication, June 5, 2002.

Table 1-24: Condition of U.S. Highway Bridges

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Urban bridges	108,770	112,363	115,312	117,488	121,141	122,537	124,950	127,633	128,312	130,339	133,384
Rural bridges	463,435	461,673	456,885	456,228	455,319	458,598	456,913	455,118	454,664	455,203	456,290
Total	**572,205**	**574,036**	**572,197**	**573,716**	**576,460**	**581,135**	**581,863**	**582,751**	**582,976**	**585,542**	**589,674**
Urban deficient bridges											
Structurally	16,847	17,032	16,323	15,932	15,692	15,205	15,094	14,846	14,073	12,967	12,695
Functionally	30,266	30,842	26,243	26,511	27,024	27,487	28,087	26,865	27,588	29,065	29,398
Total	**47,113**	**47,874**	**42,566**	**42,443**	**42,716**	**42,692**	**43,181**	**41,711**	**41,661**	**42,032**	**42,093**
Rural deficient bridges											
Structurally	121,018	117,502	102,375	96,048	91,991	89,112	86,424	83,629	78,999	75,183	70,881
Functionally	70,089	66,751	54,150	53,489	52,808	53,463	53,121	50,545	51,912	52,835	52,112
Total	**191,107**	**184,253**	**156,525**	**149,537**	**144,799**	**142,575**	**139,545**	**134,174**	**130,911**	**128,018**	**122,993**
All deficient bridges											
Structurally	137,865	134,534	118,698	111,980	107,683	104,317	101,518	98,475	93,072	88,150	83,576
Functionally	100,355	97,593	80,393	80,000	79,832	80,950	81,208	77,410	79,500	81,900	81,510
Total	**238,220**	**232,127**	**199,091**	**191,980**	**187,515**	**185,267**	**182,726**	**175,885**	**172,572**	**170,050**	**165,086**

NOTES: Structurally deficient bridges are defined as those needing significant maintenance attention, rehabilitation, or replacement.

Functionally deficient bridges: those that do not have the lane widths, shoulder widths, or vertical clearances adequate to serve traffic demand; or the bridge may not be able to handle occasional roadway flooding. Table includes: rural–Interstate, principal arterial, minor arterial, major collector, minor collector and local roads; urban–Interstate, other freeways or expressways, other principal arterial, minor arterial, collector, and local roads.

Data for 1990, 1992 and 1997-99 are as of December of those years; data for 1991, 1994-96 are as of June of those years; data for 1993 is as of September of that year; and data for 2000 is as of August of that year.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, Office of Bridge Technology, National Bridge Inventory Database, personal communication, Aug. 14, 2001.

Table 1-25: Average Age of Urban Transit Vehicles (Years)

	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Transit rail											
Commuter rail locomotives[a]	16.3	15.7	15.3	15.8	15.6	15.3	15.9	17.6	17.0	14.7	13.2
Commuter rail passenger coaches	19.1	17.6	17.3	19.3	18.6	20.1	21.4	24.1	21.6	19.4	17.5
Commuter rail self-propelled passenger cars	12.3	15.9	16.5	17.6	18.2	16.0	19.8	21.1	22.3	23.2	24.3
Heavy-rail passenger cars	17.1	16.2	16.9	17.7	17.8	15.8	19.3	20.2	21.1	22.0	22.5
Light rail vehicles (streetcars)	20.6	15.2	16.6	17.0	14.9	16.7	16.8	16.0	15.9	15.7	15.7
Transit bus[b]											
Articulated	3.4	7.6	8.2	9.1	9.5	9.1	10.9	11.5	11.9	11.3	8.6
Full-size	8.1	8.2	8.0	8.3	8.5	9.9	8.7	8.8	8.6	8.5	8.4
Mid-size	5.6	6.6	6.7	6.8	6.4	7.2	6.9	6.3	5.8	5.7	5.6
Small	4.8	3.9	4.0	4.1	4.0	4.4	4.1	4.1	4.0	4.0	4.1
Trolley	U	10.9	10.3	11.2	12.0	11.1	13.1	14.0	14.7	14.6	15.6
Other											
Vans	3.8	2.8	3.0	3.1	3.1	3.9	3.1	3.1	3.0	2.9	3.1
Ferry boats	U	21.7	19.6	22.7	24.7	23.5	23.4	25.3	25.4	25.8	25.1

KEY: U = data are not available.

[a] Locomotives used in Amtrak intercity passenger services are not included.
[b] Full-size buses have more than 35 seats; mid-size buses have 25-35 seats; small buses have fewer than 25 seats.

SOURCES: 1985-1998: U.S. Department of Transportation, Federal Transit Administration, *National Transit Database* (Washington, DC: Annual issues), table 28 and similar tables in earlier editions.
1999: Ibid., *National Transit Database* (Washington, DC: Annual issues), table 29.

Table 1-26: Class I Railroad Locomotive Fleet by Year Built (Locomotive units)

Year built [a]	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total	**18,835**	**18,344**	**18,004**	**18,161**	**18,505**	**18,812**	**19,269**	**19,684**	**20,261**	**20,256**	**20,028**
Before 1970	5,117	4,353	4,038	3,766	3,535	[b]	[b]	[b]	[b]	[b]	[f]
1970-74	3,852	3,617	3,384	3,248	3,184	[c]6,048	[c]5,783	[c]5,529	[c]5,565	[c]5196	[f]
1975-79	4,432	4,375	4,292	4,352	4,275	4,254	4,274	4,219	4,116	4,000	[g]8,541
1980-84	2,837	2,826	2,784	2,730	2,625	2,754	2,735	2,728	2,723	2,581	2,411
1985-89	1,989	1,985	1,970	1,968	1,971	1,890	1,866	1,829	1,830	1,779	1,775
1990	608	605	604	604	599	[d]2,965	[d]2,959	[d]2,958	[d]2,736	[d]2,688	[d]2,648
1991		583	595	595	594	[e]	[e]	[e]	[e]	[e]	[e]
1992			337	340	339	[e]	[e]	[e]	[e]	[e]	[e]
1993				558	602	[e]	[e]	[e]	[e]	[e]	[e]
1994					781	[e]	[e]	[e]	[e]	[e]	[e]
1995						901	945	983	953	951	973
1996							707	696	708	706	697
1997								742	741	743	745
1998									889	890	890
1999										722	713
2000											635

[a] Disregards year of rebuilding.

[b] Included in 1970-74 category.

[c] Includes all locomotives built before 1975.

[d] Includes locomotives built between 1990-94.

[e] Included in 1990 category.

[f] Included in 1975-79 category.

[g] Includes all locomotives built before 1980.

SOURCE: Association of American Railroads, *Railroad Facts* (Washington, DC: Annual issues).

Table 1-27: Age and Availability of Amtrak Locomotive and Car Fleets

	1972	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Locomotives															
% available for service[a]	N	87	83	93	84	86	83	84	85	88	88	88	88	90	89
Average age (years)[b]	22.3	14.4	7.4	7.0	12.0	13.0	13.0	13.2	13.4	13.9	14.4	12.0	12.6	12.8	11.2
Passenger and other train cars															
% available for service[a]	N	82	77	90	90	92	90	89	88	90	90	91	93	91	91
Average age (years)[b]	22.0	24.7	14.3	14.2	20.0	21.0	21.5	22.6	22.4	21.8	20.7	R19.8	R21.1	R22.2	19.4

KEY: N = data do not exist; R = revised.

[a] Year-end daily average. Active units less backshop units undergoing heavy maintenance less back-ordered units undergoing progressive maintenance and running repairs.
[b] Year-end average.

NOTE: 1972 was Amtrak's first full fiscal year of operation.

SOURCES:
1972-80: Amtrak, *Amtrak Annual Report* (Washington, DC: Annual issues).
1985-99: Ibid., *Amtrak Annual Report,* Statistical Appendix (Washington, DC: Annual issues).
2000: Ibid., *Amtrak Annual Report* , Statistical Appendix (Washington, DC: Annual issues).

Table 1-28: U.S. Flag Vessels by Type and Age (Number of vessels)

	Vessel type							
Age[a]	Dry cargo	Tanker	Towboat	Passenger[b]	Offshore support/ crewboats[c]	Dry barge	Tank/ liquid barge[d]	Total[e]
1990-91								
<=5	80	6	132	151	85	2,335	162	2,951
6-10	161	38	706	120	318	4,570	316	6,229
11-15	212	50	1,029	110	474	7,639	829	10,343
16-20	141	35	844	80	144	6,374	750	8,368
21-25	82	38	750	65	84	2,607	759	4,385
>25	196	86	1,718	188	51	3,372	1,049	6,660
Total[e]	**900**	**257**	**5,210**	**721**	**1,168**	**27,110**	**3,874**	**39,342**
1992								
<=5	36	5	134	219	93	3,224	296	4,012
6-10	73	28	398	198	208	1,783	121	2,829
11-15	135	54	1,137	203	567	9,114	902	12,150
16-20	73	33	926	169	189	6,696	740	8,853
21-25	31	42	716	122	91	2,475	677	4,167
>25	124	82	1,874	287	53	3,496	1,123	7,049
Total[e]	**497**	**249**	**5,203**	**1,201**	**1,205**	**26,981**	**3,864**	**39,313**
1993								
<=5	25	3	135	207	103	3,558	325	4,356
6-10	67	22	205	221	107	1,070	68	1,764
11-15	135	43	1,221	211	597	8,810	869	11,894
16-20	70	33	968	164	218	6,772	791	9,019
21-25	41	31	674	129	106	2,904	655	4,543
>25	128	73	2,008	311	64	3,713	1,256	7,555
Total[e]	**470**	**205**	**5,219**	**1,243**	**1,197**	**26,982**	**3,970**	**39,306**
1994								
<=5	46	4	146	157	107	3,630	399	4,489
6-10	103	12	151	185	61	1,171	36	1,719
11-15	200	36	1,135	123	540	7,903	754	10,691
16-20	130	44	966	122	309	6,314	799	8,684
21-25	90	32	664	82	130	3,873	638	5,509
>25	206	74	2,107	259	86	3,706	1,327	7,765
Total[e]	**778**	**202**	**5,179**	**928**	**1,236**	**26,757**	**3,966**	**39,064**
1995								
<=5	38	5	168	149	119	3,975	489	4,943
6-10	90	8	134	195	58	1,483	46	2,014
11-15	168	34	959	133	463	6,387	611	8,760
16-20	135	38	988	121	412	6,507	736	8,939
21-25	80	29	726	91	141	4,897	697	6,661
>25	213	64	2,146	263	92	3,966	1,403	8,148
Total[e]	**726**	**178**	**5,127**	**954**	**1,288**	**27,375**	**3,985**	**39,641**

continued

Table 1-28 *continued*

Age[a]	Vessel type							
	Dry cargo	Tanker	Towboat	Passenger[b]	Offshore support/ crewboats[c]	Dry barge	Tank/ liquid barge[d]	Total[e]
1996								
<=5	43	7	205	153	123	5,189	573	6,293
6-10	74	8	118	188	61	2,041	87	2,577
11-15	141	29	715	142	351	4,505	346	6,229
16-20	155	36	1,036	119	460	7,234	840	9,881
21-25	79	23	842	87	155	5,416	723	7,325
>25	229	62	2,386	290	144	4,766	1,576	9,453
Total[e]	**713**	**161**	**5,177**	**967**	**1,274**	**28,775**	**4,036**	**41,104**
1997								
<=5	52	8	227	150	122	5,515	519	6,593
6-10	66	2	118	187	94	2,582	181	3,230
11-15	96	27	396	152	223	1,800	137	2,831
16-20	183	36	1,173	131	588	8,943	928	11,982
21-25	84	21	918	102	177	5,772	727	7,801
>25	209	53	2,332	302	159	4,284	1,477	8,816
Total[e]	**692**	**147**	**5,173**	**1,025**	**1,369**	**29,040**	**3,971**	**41,419**
1998								
<=5	56	12	247	150	163	5,877	485	6,991
6-10	55	3	124	168	105	3,117	267	3,839
11-15	105	19	196	166	111	1,113	72	1,782
16-20	179	31	1,198	129	634	8,591	865	11,626
21-25	88	22	979	106	211	5,909	763	8,076
>25	230	48	2,487	292	195	4,817	1,499	9,573
Total[e]	**714**	**135**	**5,237**	**1,011**	**1,423**	**29,557**	**3,952**	**42,032**
1999								
<=5	60	12	302	144	245	6,640	565	7,968
6-10	49	3	140	146	114	3,192	298	3,943
11-15	97	12	146	183	61	1,231	39	1,769
16-20	146	35	1,101	120	571	7,414	742	10,129
21-25	99	30	953	95	283	5,302	760	7,522
>25	243	50	2,447	282	191	5,491	1,560	10,267
Total[e]	**695**	**142**	**5,098**	**970**	**1,470**	**29,414**	**3,973**	**41,766**
2000								
<=5	66	11	325	134	246	6,721	582	8,085
6-10	50	4	143	118	106	3,051	329	3,802
11-15	113	8	142	178	58	1,565	48	2,112
16-20	136	34	929	124	454	5,846	602	8,125
21-25	105	30	954	90	332	5,365	712	7,588
>25	263	48	2,497	271	214	6,461	1,714	11,470
Total[e]	**737**	**135**	**4,995**	**918**	**1,414**	**29,141**	**4,011**	**41,354**

[a] Age is based on the year the vessel was built or rebuilt.

[b] Includes passenger excursion/sightseeing, combination passenger and dry cargo vessels, and ferries.

[c] In 1992, offshore supply boats were designated as crewboats.

[d] In 1992, tank barges were designated as liquid barges.

[e] Totals may be greater than sum of columns because of unclassified vessels and vessels of unknown age; figures include vessels available for operation.

SOURCE: U.S. Army Corps of Engineers, *Waterborne Transportation Lines of the United States, Volume 1, National Summaries* (New Orleans, LA: Annual issues), Table 4 in 2000 and similar tables in previous years; also available on Internet site www.wrsc.usace.army.mil/ndc/ as of June 25, 2002.

Table 1-29: U.S. Vehicle-Miles (Millions)

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Air																	
Air carrier, large certificated, domestic, all services	858	1,134	2,068	1,948	2,523	3,046	3,963	3,854	3,995	4,157	4,380	4,629	4,811	4,911	5,035	5,332	5,646
General aviation[a]	1,769	2,562	3,207	4,238	5,204	4,673	4,548	4,400	3,465	3,253	3,358	3,795	3,524	3,877	N	N	N
Highway																	
Passenger car[b,c]	587,012	722,696	916,700	1,033,950	1,111,596	1,246,798	1,408,266	1,358,185	1,371,569	1,374,709	1,406,089	R1,438,294	1,469,854	1,502,556	1,549,577	1,569,100	1,601,914
Motorcycle[b]	[h]	[h]	2,979	5,629	10,214	9,086	9,557	9,178	9,557	9,906	10,240	9,797	9,920	10,081	10,283	10,584	10,479
Other 2-axle 4-tire vehicle[c]	[h]	[h]	123,286	200,700	290,935	390,961	574,571	649,394	706,863	745,750	764,634	790,029	816,540	850,739	868,275	901,022	924,018
Truck																	
Single-unit 2-axle 6-tire or more truck	98,551	128,769	27,081	34,606	39,813	45,441	51,901	52,898	53,874	56,772	61,284	62,705	64,072	66,893	68,021	70,304	70,583
Combination truck	28,854	31,665	35,134	46,724	68,678	78,063	94,341	96,645	99,510	103,116	108,932	115,451	118,899	124,584	128,359	132,384	135,208
Bus	4,346	4,681	4,544	6,055	6,059	4,478	5,726	5,750	5,778	6,125	6,409	6,420	6,563	6,842	7,007	7,662	7,601
Total highway[c]	**718,763**	**887,811**	**1,109,724**	**1,327,664**	**1,527,295**	**1,774,827**	**2,144,362**	**2,172,050**	**2,247,151**	**2,296,378**	**2,357,588**	**R2,422,696**	**2,485,848**	**2,561,695**	**2,631,522**	**2,691,056**	**2,749,803**
Transit																	
Motor bus[d]	1,576	1,528	1,409	1,526	1,677	1,863	2,130	2,167	2,178	2,210	2,162	2,184	2,221	2,245	R2,175	P2,276	U
Light rail	75	42	34	24	18	17	24	28	29	28	34	35	38	41	R44	P49	U
Heavy rail	391	395	407	423	385	451	537	527	525	522	532	537	543	558	566	P578	U
Trolley bus	101	43	33	15	13	16	14	14	14	13	14	14	14	14	14	P14	U
Commuter rail	N	N	N	173	179	183	213	215	219	224	231	238	242	251	R260	P266	U
Demand responsive[d]	N	N	N	N	N	247	306	335	364	406	464	507	548	585	R671	P718	U
Ferry boat	N	N	N	N	[i]	[i]	2	2	2	3	2	3	2	R3	R3	P3	U
Other	N	N	N	15	15	15	R16	R19	R24	R30	R29	R34	R43	R50	R63	P69	U
Total transit[e]	**2,143**	**2,008**	**1,883**	**2,176**	**2,287**	**2,791**	**3,242**	**3,306**	**3,355**	**3,435**	**3,468**	**3,550**	**3,650**	**3,746**	**R3,794**	**P3,972**	**U**
Rail																	
Class I freight, train-miles	404	421	427	403	428	347	380	375	390	405	441	458	469	475	475	490	504
Class I freight, car-miles	28,170	29,336	29,890	27,656	29,277	24,920	26,159	25,628	26,128	26,883	28,485	30,383	31,715	31,660	32,657	33,851	34,590
Intercity/Amtrak[f], train-miles	209	172	93	30	30	30	33	34	34	35	34	32	30	32	33	34	35
Intercity/Amtrak[f], car-miles	2,208	1,775	690	253	235	251	301	313	307	303	304	292	276	288	312	342	368
Total train-miles[g]	**613**	**593**	**520**	**433**	**458**	**377**	**413**	**409**	**424**	**440**	**475**	**490**	**499**	**507**	**508**	**524**	**539**

KEY: N = data do not exist; P = preliminary; R = revised.

[a] All operations other than those operating under 14 CFR 121 and 14 CFR 135. Data for 1996 are estimated using new information on nonrespondents and are not comparable to earlier years. Mileage in source is multiplied by 1.151 to convert to nautical-miles for 1985-1997.

[b] U.S. Department of Transportation, Federal Highway Administration (FHWA), provides data separately for passenger car and motorcycle in its annual *Highway Statistics* series. However, the 1995 summary report provides updated data for passenger car and motorcycle combined. Passenger car figures in this table were computed by U.S. Department of Transportation, Bureau of Transporation Statistics by subtracting the most current motorcycle figures from the aggregate passenger car and motorcycle figures.

[c] In July 1997, the FHWA published revised vehicle-miles data for the highway modes for many years. The major change reflected the reassignment of some vehicles from the passenger car category to the other 2-axle 4-tire vehicle category.

[d] Motor bus and demand responsive figures are also included in the bus figure for highway.

[e] Prior to 1985, excludes demand responsive and most rural and smaller systems funded via Sections 18 and 16(b)2, Federal Transit Act. The series is not continuous between 1980 and 1985. Transit rail modes are measured in car-miles. Car-miles measure individual vehicle-miles in a train. A 10-car train traveling 1 mile would equal 1 train-mile and 10 car-miles.

[f] Amtrak began operations in 1971.

[g] Although both train-miles and car-miles are shown for rail, only train-miles are included in the total. A train-mile is the movement of a train, which can consist of multiple vehicles (cars), the distance of 1 mile. This differs from a vehicle-mile, which is the movement of 1 vehicle the distance of 1 mile. A 10-vehicle train traveling 1 mile would be measured as 1 train-mile and 10 vehicle-miles. Caution should be used when comparing train-miles with vehicle miles.

[h] 1960–65, motorcycle data are included in passenger car, and other 2-axle 4-tire vehicle data included in single-unit 2-axle 6-tire or more truck.

[i] Ferry boat included with other.

SOURCES:

Air:

Air carrier:

1960: Civil Aeronautics Board, *Handbook of Airline Statistics 1969* (Washington, DC: 1970), part III, table 2.

1965-70: Ibid., *Handbook of Airline Statistics 1973* (Washington, DC: 1974), part III, table 2.

1975-80: Ibid., *Air Carrier Traffic Statistics* (Washington, DC: 1976, 1981), p. 4 (December 1976) and p. 2 (December 1981).
1985-2000: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, Air Carrier Traffic Statistics (Washington, DC: Annual December issues), p. 2, line 27 plus line 50.
General aviation:
1960-65: U.S. Department of Transportation, Federal Aviation Administration, *FAA Statistical Handbook of Aviation* 1972 (Washington, DC: 1973), table 9.10.
1970-75: U.S. Department of Transportation, Federal Aviation Administration, *FAA Statistical Handbook of Aviation* 1976 (Washington, DC: 1976), table 8-5.
1980: U.S. National Transportation Safety Board estimate, personal communication, Dec. 7, 1998.
1985-92: Ibid., *General Aviation Activity and Avionics Survey* (Washington, DC: Annual issues,) table 3.3.
1993-97: Ibid., *General Aviation and Air Taxi Activity and Avionics Survey* (Washington, DC: Annual issues), table 3.3.
Highway:
Passenger car and motorcycle:
1960-94: U.S. Department of Transportation, Federal Highway Administration, Highway Statistics Summary to 1995 , Internet site http://www.fhwa.dot.gov/ohim/summary95/index.html, as of July 28, 2000, table VM-201A.
1995-2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table VM-1, and Internet site www.fhwa.dot.gov/ohim/ohimstat.htm.
Motorcycle:
1970-80: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics, Summary to 1985* (Washington, DC: 1986), table VM-201A.
1985-2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table VM-1, and Internet site www.fhwa.dot.gov/ohim/ohimstat.htm.
Other 2-axle 4-tire vehicle:
1970-94: U.S. Department of Transportation, Federal Highway Administration, Highway Statistics Summary to 1995, Internet site http://www.fhwa.dot.gov/ohim/summary95/index.html, as of July 28, 2000, table VM-201A.
1995-2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table VM-1, and Internet site www.fhwa.dot.gov/ohim/ohimstat.htm.
Single-unit 2-axle 6-tires or more truck, combination truck, and *bus:*
1960-94: U.S. Department of Transportation, Federal Highway Administration, Highway Statistics Summary to 1995 , Internet site http://www.fhwa.dot.gov/ohim/summary95/index.html, as of July 28, 2000, table VM-201A.
1995-2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table VM-1, and Internet site www.fhwa.dot.gov/ohim/ohimstat.htm.
Transit:
1960-99: American Public Transit Association, *Public Transportation Fact Book* (Washington, DC: 2001), table 42, 84, and similar tables in earlier editions.
Rail:
Class I rail freight train- and car-miles:
1960-2000: Association of American Railroads, *Railroad Facts, 2000* (Washington, DC: 2001), p. 33 (train-miles) and p. 34 (car-miles).
Intercity/Amtrak train-miles:
1960-70: Association of American Railroads, *Yearbook of Railroad Facts* (Washington, DC: 1975), p. 39.
1975-2000: Amtrak, *Amtrak Annual Report,* Statistical Appendix (Washington, DC: Annual issues).
Intercity/Amtrak car-miles:
1960-75: Association of American Railroads, *Yearbook of Railroad Facts* (Washington, DC: 1975), p. 40.
1980-2000: Amtrak, Amtrak Corporate Reporting, Route Profitability System, personal communication, 2001.

Table 1-30: Roadway Vehicle-Miles Traveled (VMT) and VMT per Lane-Mile by Functional Class

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
VMT (millions)													
Urban													
Interstate	161,242	216,188	278,901	285,325	303,265	317,399	330,577	R341,528	351,579	361,401	374,622	383,103	393,420
Other arterials[a]	484,189	578,270	699,233	707,518	745,618	773,978	797,899	R815,170	834,623	846,659	862,994	877,796	899,794
Collector	83,043	89,578	106,297	107,281	116,065	117,887	120,088	R126,929	129,310	130,143	131,919	131,549	135,316
Local	126,791	160,062	191,053	188,373	198,106	200,408	200,683	205,907	208,374	222,142	228,530	234,507	235,634
Total	**855,265**	**1,044,098**	**1,275,484**	**1,288,497**	**1,363,054**	**1,409,672**	**1,449,247**	**R1,489,534**	**1,523,886**	**1,560,345**	**1,598,065**	**1,626,955**	**1,664,164**
Rural													
Interstate	135,084	154,357	200,173	205,011	205,557	208,308	215,568	223,382	232,565	240,255	251,520	260,060	268,850
Other arterials[a]	262,774	282,803	330,866	334,755	344,062	349,567	357,329	368,595	378,847	392,058	403,484	413,152	420,398
Collector[b]	189,468	206,669	240,460	245,630	234,910	226,296	230,529	236,148	241,030	254,364	257,858	264,345	267,412
Local	84,704	86,899	97,379	98,157	99,568	102,535	104,915	105,164	107,752	114,673	120,595	125,875	127,859
Total	**672,030**	**730,728**	**868,878**	**883,553**	**884,097**	**886,706**	**908,341**	**933,289**	**960,194**	**1,001,350**	**1,033,457**	**1,063,432**	**1,084,519**
VMT per lane-mile (thousands)													
Urban													
Interstate	3,327	3,773	4,483	4,542	4,508	4,588	4,667	R4,784	4,897	R5,002	R5,131	5,229	5,325
Other arterials[a]	1,451	1,556	1,751	1,758	1,783	1,778	1,803	R1,829	1,857	R1,866	R1,901	1,950	1,977
Collector	572	552	634	649	659	656	655	686	692	R689	R703	706	718
Local	146	168	184	179	181	179	178	181	181	R190	R194	198	197
Total	**613**	**677**	**764**	**766**	**775**	**782**	**794**	**R810**	**820**	**R829**	**R845**	**858**	**869**
Rural													
Interstate	1,031	1,170	1,473	1,502	1,540	1,576	1,642	1,693	1,749	1,804	R1,888	1,939	1,998
Other arterials[a]	518	555	640	646	653	665	674	695	R711	R730	R750	766	779
Collector[b]	132	141	164	167	163	158	161	167	170	179	182	187	189
Local	19	20	23	23	23	24	25	25	25	27	29	30	30
Total	**103**	**113**	**136**	**138**	**139**	**140**	**144**	**148**	**R152**	**157**	**R165**	**169**	**172**

KEY: R = revised.

[a] For urban: the sum of other freeways and expressways, other principal arterials, and minor arterials.
For rural: the sum of other principal arterials and minor arterials.

[b] Collector is the sum of major and minor collectors (rural only).

NOTE: See table 1-6 for estimated highway lane-miles by functional class.

SOURCES: 1980-94: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995,* FHWA-PL-97-009 (Washington, DC: July 1997), table VM-202.
1995-1998, 2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), tables VM-2 and VM-2A.
1999: Ibid., personal communication, June 5, 2002.
Lane-miles:
1980-95: Ibid., Office of Highway Information Management, unpublished data, 1997, table HM-260.
1996-1998, 2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table HM-60.

Table 1-31: U.S. Passenger-Miles (Millions)

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Air																	
Air carrier, certificated, domestic, all services	31,099	53,226	108,442	136,000	204,368	277,836	345,873	338,085	354,764	362,230	388,399	403,888	434,652	450,612	463,262	488,357	515,367
General aviation[a]	2,300	4,400	9,100	11,400	14,700	12,300	13,000	12,100	10,800	9,900	9,800	10,800	12,000	12,500	R13,100	13,500	U
Total	**33,399**	**57,626**	**117,542**	**147,400**	**219,068**	**290,136**	**358,873**	**350,185**	**365,564**	**372,130**	**398,199**	**414,688**	**446,652**	**463,112**	**476,362**	**501,857**	**U**
Highway																	
Passenger car[b,c]	1,144,673	1,394,803	1,750,897	1,954,166	2,011,989	2,094,621	2,281,391	2,200,260	2,208,226	2,213,281	2,249,742	2,271,310	2,337,068	2,389,064	2,463,827	2,494,870	2,547,044
Motorcycle[b,c]	[g]	[g]	3,277	6,192	12,257	11,812	12,424	11,656	11,946	12,184	12,390	11,560	11,706	11,896	12,134	11,642	11,527
Other 2-axle 4-tire vehicle[c]	[h]	[h]	225,613	363,267	520,774	688,091	999,754	1,116,958	1,201,667	1,252,860	1,269,292	1,295,648	1,339,126	1,395,212	1,423,971	1,432,625	1,469,189
Truck																	
Single-unit 2-axle 6-tire or more truck	98,551	128,769	27,081	34,606	39,813	45,441	51,901	52,898	53,874	56,772	61,284	62,705	64,072	66,893	R68,021	70,304	70,583
Combination truck	28,854	31,665	35,134	46,724	68,678	78,063	94,341	96,645	99,510	103,116	108,932	115,451	118,899	124,584	128,359	132,384	135,208
Bus[d]	N	N	N	N	N	94,925	121,398	121,906	122,496	129,852	135,871	136,104	138,613	145,060	R148,558	162,445	161,152
Total[c]	**1,272,078**	**1,555,237**	**2,042,002**	**2,404,954**	**2,653,510**	**3,012,953**	**3,561,209**	**3,600,322**	**3,697,719**	**3,768,066**	**3,837,512**	**3,892,778**	**4,009,484**	**4,132,709**	**R4,244,870**	**4,304,270**	**4,394,703**
Transit																	
Motor bus[d]	N	N	N	N	21,790	21,161	20,981	21,090	20,336	20,247	18,832	18,818	19,096	19,604	R20,360	P21,205	U
Light rail	N	N	N	N	381	350	571	662	701	705	833	860	957	1,035	R1,128	P1,206	U
Heavy rail	N	N	N	N	10,558	10,427	11,475	10,528	10,737	10,231	10,668	10,559	11,530	12,056	12,284	P12,902	U
Trolley bus	N	N	N	N	219	306	193	195	199	188	187	187	184	189	182	P186	U
Commuter rail	4,197	4,128	4,592	4,513	6,516	6,534	7,082	7,344	7,320	6,940	7,996	8,244	8,351	8,038	R8,704	P8,766	U
Demand responsive[d]	N	N	N	N	N	364	431	454	495	562	577	607	656	754	R735	P813	U
Ferry boat	N	N	N	N	[i]	[i]	286	282	271	260	260	260	R265	R294	R294	P310	U
Other	N	N	N	N	390	439	124	148	182	251	232	273	R339	R369	R441	P469	U
Total[e]	**[j]4,197**	**[j]4,128**	**[j]4,592**	**[j]4,513**	**39,854**	**39,581**	**41,143**	**40,703**	**40,241**	**39,384**	**39,585**	**39,808**	**41,378**	**42,339**	**R44,128**	**P45,857**	**U**
Rail																	
Intercity/Amtrak[f]	17,064	13,260	6,179	3,931	4,503	4,825	6,057	6,273	6,091	6,199	5,921	5,545	5,050	5,166	5,304	5,330	5,498

KEY: N = data do not exist; P = preliminary; R = revised; U = data are not available.

[a] All operations other than those operating under 14 CFR 121 and 14 CFR 135.
[b] U.S. Department of Transportation, Federal Highway Administration (FHWA), provides data separately for passenger car and motorcycle in its annual *Highway Statistics* series. However, the 1995 summary report provides updated data for passenger car and motorcycle combined. Passenger car figures in this table were computed by U.S. Department of Transportation, Bureau of Transporation Statistics by subtracting the most current motorcycle figures from the aggregate passenger car and motorcycle figures.
[c] In July 1997, FHWA published revised passenger-miles data for the highway modes for a number of years. The major change reflected the reassignment of some vehicles from the passenger car category to the other 2-axle 4-tire vehicle category. Passenger-miles for passenger car, motorcycle, and other 2-axle 4-tire vehicles were derived by multiplying vehicle-miles for these vehicles by average vehicle occupancy rates, provided by the Nationwide Personal Transportation Survey, 1977, 1983, and 1995.
[d] Motor bus and demand responsive figures are also included in the bus figure for highway.
[e] Prior to 1985, excludes demand responsive and most rural and smaller systems funded via Sections 18 and 16(b)2, Federal Transit Act. The series is not continuous between 1980 and 1985. Transit rail modes are measured in car-miles. Car-miles measure individual vehicle-miles in a train. A 10-car train traveling 1 mile would equal 1 train-mile and 10 car-miles.
[f] Amtrak began operations in 1971. Does not include contract commuter passengers.
[g] Included in passenger car.
[h] Included in other single-unit 2-axle 6-tire or more truck.
[i] Ferry boat included in other.
[j] Includes commuter rail figures only.

NOTES: Air carrier passenger-miles are computed by summing of the products of the aircraft-miles flown on each interairport segment multiplied by the number of passengers carried on that segment. Highway passenger-miles are calculated by multiplying vehicle-miles of travel as cited by FHWA by the average number of occupants for each vehicle type. Average vehicle occupancy rates are based on various sources, such as the Nationwide Personal Transportation Survey, conducted by the Federal Highway Administration, and the Truck Inventory and Use Survey, conducted by the Bureau of the Census. Transit passenger-miles are the cumulative sum of the distances ridden by each passenger. Rail passenger-miles represent the movement of 1 passenger for 1 mile.

SOURCES:
Air:
Air carrier, domestic, all services:
1960: Civil Aeronautics Board, *Handbook of Airline Statistics 1969* (Washington, DC: 1970), part III, table 2.
1965-70: Ibid., *Handbook of Airline Statistics 1973* (Washington, DC: 1974), part III, table 2.
1975-80: Ibid., *Air Carrier Traffic Statistics* (Washington, DC: 1976, 1981), p. 4 (December 1976) and p. 2 (December 1981).
1985-2000: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, *Air Carrier Traffic Statistics* (Washington, DC: Annual December issues), page 2, line 1.
General aviation:
1960-99: Eno Transportation Foundation, Inc., *Transportation in America, 2000* (Washington, DC: 2001), pp. 14-15.
Highway:
Passenger car and motorcycle:
1960-94: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995,* Internet site http://www.fhwa.dot.gov/ohim/summary95/index.html as of July 28, 2000, table VM-201A.
1995-2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table VM-1, and Internet site www.fhwa.dot.gov/ohim/ohimstat.htm.
Motorcycle:
1970-80: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics, Summary to 1985* (Washington, DC: 1986), table VM-201A.
1985-2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table VM-1, and Internet site www.fhwa.dot.gov/ohim/ohimstat.htm.

Motorcycle:

1970-80: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics, Summary to 1985* (Washington, DC: 1986), table VM-201A.

1985-2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table VM-1, and Internet site www.fhwa.dot.gov/ohim/ohimstat.htm.

Other 2-axle 4-tire vehicle:

1970-94: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995*, Internet site http://www.fhwa.dot.gov/ohim/summary95/index.html as of July 28, 2000, table VM-201A.

1995-2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table VM-1, and Internet site www.fhwa.dot.gov/ohim/ohimstat.htm.

Single-unit 2-axle 6-tires or more truck, combination truck, and *bus:*

1960-94: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995*, Internet site http://www.fhwa.dot.gov/ohim/summary95/index.html as of July 28, 2000, table VM-201A.

1995-2000: Ibid., *Highway Statistics* (Washington, DC: Annual issues), table VM-1, and Internet site www.fhwa.dot.gov/ohim/ohimstat.htm.

Transit:

Ferry boat and other:

1992: American Public Transit Association, personal communication, July 19, 2000.

1996-99: American Public Transit Association, personal communication, Aug. 13, 2001.

All other data:

1960-99: American Public Transit Association, *Transit Fact Book* (Washington, DC: 2001), table 30 and similar tables in earlier editions.

Rail, Intercity/Amtrak:

1960-80: Association of American Railroads, *Railroad Facts* (Washington, DC: Annual issues).

1985: Amtrak, *Amtrak FY95 Annual Report* Statistical Appendix (Washington, DC: 1996), p. 4.

1990-2000: Ibid., *Amtrak FY00 Annual Report* Statistical Appendix (Washington, DC: 2001), p. 46.

Table 1-32: Principal Means of Transportation to Work (Thousands)

	1985		1989		1993		1997		1999	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All workers	99,592	100.0	106,630	100.0	103,741	100.0	116,469	100.0	118,041	100.0
Automobile	86,148	86.5	93,943	88.1	91,301	88.0	101,907	87.5	103,466	87.7
Drives self	72,137	72.4	81,322	76.3	79,449	76.6	90,207	77.5	92,363	78.2
Carpool	14,011	14.1	12,621	11.8	11,852	11.4	11,700	10.0	11,103	9.4
2 person	10,381	10.4	9,708	9.1	9,105	8.8	9,294	8.0	8,705	7.4
3 person	2,024	2.0	1,748	1.6	1,684	1.6	1,526	1.3	1,454	1.2
4+ person	1,606	1.6	1,165	1.1	1,063	1.0	881	0.8	945	0.8
Public transportation[a]	5,091	5.1	4,880	4.6	4,740	4.6	5,337	4.6	5,779	4.9
Taxicab	129	0.1	152	0.1	117	0.1	139	0.1	144	0.1
Bicycle or motorcycle	958	1.0	795	0.7	744	0.7	738	0.6	749	0.6
Walks only	4,032	4.0	3,634	3.4	3,227	3.1	3,869	3.3	3,627	3.1
Other means[b]	286	0.3	491	0.5	474	0.5	867	0.7	987	0.8
Works at home	2,947	3.0	2,736	2.6	3,137	3.0	3,611	3.1	3,288	2.8

[a] Public transportation refers to bus, streetcar, subway, or elevated trains.

[b] Other means include ferryboats, surface trains, and van service.

NOTES: Principal means of transportation refers to the mode used most often, when different means of transportation were used on different days of the week, or the mode used for the longest distance during the trip to work, when more than one mode is used to get to work each day.

SOURCE: U.S. Department of Housing and Urban Development, *American Housing Survey* (Washington, DC: Various years).

Table 1-33: Long-Distance Travel in the United States by Selected Trip Characteristics: 1995
(Roundtrips of 100 miles or more, one way, U.S. destinations only)

	Household trips (thousands)		Person trips (thousands)		Person-miles (millions)		Personal-use vehicle trips (thousands)		Personal-use vehicle-miles (millions)	
	Number	%	Number	%	Number	%	Number	%	Number	%
TOTAL	**656,462**	**100.0**	**1,001,319**	**100.0**	**826,804**	**100.0**	**505,154**	**100.0**	**280,127**	**100.0**
Principal means of transportation										
Personal-use vehicle	505,154	77.0	813,858	81.3	451,590	54.6	505,154	100.0	280,127	100.0
Airplane	129,164	19.7	161,165	16.1	355,286	43.0	NA	NA	NA	NA
Commercial airplane	124,884	19.0	155,936	15.6	347,933	42.1	NA	NA	NA	NA
Bus	17,340	2.6	20,445	2.0	13,309	1.6	NA	NA	NA	NA
Intercity	2,755	0.4	3,244	0.3	2,723	0.3	NA	NA	NA	NA
Charter or tour	11,890	1.8	14,247	1.4	9,363	1.1	NA	NA	NA	NA
Train	4,200	0.6	4,994	0.5	4,356	0.5	NA	NA	NA	NA
Ship, boat, or ferry	391	0.1	614	0.1	1,834	0.2	NA	NA	NA	NA
Other	213	RZ	243	RZ	429	0.1	NA	NA	NA	NA
Roundtrip distance										
Less than 300 miles	194,098	29.6	306,433	30.6	74,658	9.0	185,418	36.7	45,159	16.1
300-499 miles	174,389	26.6	274,045	27.4	106,007	12.8	159,743	31.6	61,779	22.1
500-999 miles	140,046	21.3	214,006	21.4	146,631	17.7	106,846	21.2	72,114	25.7
1,000-1,999 miles	76,110	11.6	108,331	10.8	153,316	18.5	36,722	7.3	49,952	17.8
2,000 miles or more	71,819	10.9	98,503	9.8	346,192	41.9	16,425	3.3	51,123	18.3
Mean (miles)	872	NA	826	NA	NA	NA	555	NA	NA	NA
Median (miles)	438	NA	425	NA	NA	NA	368	NA	NA	NA
Calendar quarter										
1st quarter	130,963	19.9	200,331	20.0	155,603	18.8	99,549	19.7	50,801	18.1
2nd quarter	168,669	25.7	258,400	25.8	208,256	25.2	130,135	25.8	72,421	25.9
3rd quarter	193,913	29.5	304,542	30.4	261,463	31.6	152,862	30.3	90,558	32.3
4th quarter	162,917	24.8	238,047	23.8	201,471	24.4	122,607	24.3	66,346	23.7
Main purpose of trip										
Business	192,537	29.3	224,835	22.5	212,189	25.7	125,036	24.8	61,929	22.1
Pleasure	372,586	56.8	630,110	62.9	506,971	61.3	305,571	60.5	177,698	63.4
Visit relatives or friends	195,468	29.8	330,755	33.0	264,769	32.0	159,981	31.7	92,190	32.9
Leisure[a]	177,119	27.0	299,355	29.9	242,201	29.3	145,590	28.8	85,508	30.5
Rest or relaxation	65,017	9.9	115,154	11.5	100,838	12.2	53,780	10.6	33,598	12.0
Sightseeing	24,272	3.7	42,649	4.3	50,781	6.1	18,069	3.6	14,654	5.2
Outdoor recreation	39,899	6.1	65,418	6.5	41,620	5.0	35,987	7.1	19,407	6.9
Entertainment	37,456	5.7	58,757	5.9	42,929	5.2	27,920	5.5	14,531	5.2
Personal business	91,319	13.9	146,338	14.6	107,621	13.0	74,532	14.8	40,490	14.5
Other	19	RZ	36	RZ	23	RZ	16	RZ	9	RZ
Vacation or weekend trips										
Vacation trip	301,197	45.9	515,383	51.5	484,144	58.6	236,055	46.7	154,167	55.0
Weekend trip	400,755	61.0	621,948	62.1	475,269	57.5	310,379	61.4	169,309	60.4
1 or 2 nights away from home	240,808	36.7	377,893	37.7	222,418	26.9	199,831	39.6	94,865	33.9
3-5 nights away from home	159,946	24.4	244,055	24.4	252,851	30.6	110,548	21.9	74,444	26.6

continued

Table 1-33 *continued*

	Household trips (thousands)		Person trips (thousands)		Person-miles (millions)		Personal-use vehicle trips (thousands)		Personal-use vehicle-miles (millions)	
	Number	%	Number	%	Number	%	Number	%	Number	%
Travel party type										
One adult, no children under 18	386,479	58.9	386,510	38.6	352,350	42.6	275,034	54.4	144,795	51.7
Two or more adults, no children under 18	155,147	23.6	299,485	29.9	248,762	30.1	133,163	26.4	79,273	28.3
One adult, children under 18	29,436	4.5	67,959	6.8	48,083	5.8	24,879	4.9	13,827	4.9
Two or more adults, children under 18	66,086	10.1	225,875	22.6	158,334	19.2	60,497	12.0	34,759	12.4
No adult, one or more children under 18	19,313	2.9	21,489	2.1	19,275	2.3	11,581	2.3	7,473	2.7
Mean travel party size	1.6	NA	2.2	NA	NA	NA	1.7	NA	NA	NA
Nights away from home										
None	164,032	25.0	239,727	23.9	104,444	12.6	140,914	27.9	49,619	17.7
1-3 nights	321,227	48.9	502,465	50.2	331,504	40.1	259,354	51.3	131,559	47.0
4-7 nights	121,279	18.5	184,766	18.5	243,546	29.5	76,380	15.1	61,318	21.9
8 or more nights	49,924	7.6	74,361	7.4	147,309	17.8	28,506	5.6	37,631	13.4
Mean, excluding none (nights)	4.4	NA	4.3	NA	NA	NA	4.0	NA	NA	NA
Type of lodging at destination										
Friend's or relative's home	211,832	43.6	345,506	45.9	290,428	41.0	170,271	47.3	103,180	45.7
Hotel, motel, or resort	201,264	41.4	282,929	37.6	318,323	44.9	126,160	35.1	82,447	36.5
Rented cabin, condo, or vacation home	20,205	4.2	38,572	5.1	26,269	3.7	18,103	5.0	9,819	4.3
Owned cabin, condo, or vacation home	17,607	3.6	30,648	4.1	31,161	4.4	14,631	4.1	10,809	4.8
Camper, trailer, recreational vehicle, tent	11,944	2.5	22,208	3.0	15,836	2.2	11,663	3.2	8,204	3.6
Other type of lodging	23,452	4.8	32,095	4.3	27,080	3.8	18,917	5.3	11,542	5.1
Nights at destination										
Mean nights at destination	4.20	NA	4.0	NA	NA	NA	3.8	NA	NA	NA
Friend's or relative's home	4.33	NA	4.0	NA	NA	NA	3.6	NA	NA	NA
Hotel, motel, or resort	3.05	NA	3.0	NA	NA	NA	2.8	NA	NA	NA

KEY: RZ = rounds to or represents zero; NA = not applicable.

[a] Includes other leisure purposes not shown separately.

NOTES: Numbers and percentagess may not add to totals due to rounding. See glossary for definitions of categories.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *1995 American Travel Survey Profile,* BTS/ATS95-US (Washington, DC: October 1997).

Table 1-34: Long-Distance Travel in the United States by Selected Traveler Characteristics: 1995

(Roundtrips of 100 miles or more, one way, U.S. destinations only)

	Person trips (thousands)		Person-miles (millions)		Personal-use vehicle trips (thousands)		Personal-use vehicle-miles (millions)	
	Number	%	Number	%	Number	%	Number	%
TOTAL all person trips	**1,001,319**	**100**	**834,676**	**100**	**813,858**	**100**	**454,787**	**100**
Age and sex								
Under 18 years	159,779	16.0	115,869	13.9	139,360	17.1	78,517	17.3
18-24 years	92,129	9.2	67,224	8.1	79,810	9.8	43,821	9.6
25-29 years	80,060	8.0	64,009	7.7	66,510	8.2	35,809	7.9
30-39 years	189,917	19.0	167,583	20.1	146,527	18.0	78,970	17.4
40-49 years	199,991	20.0	170,379	20.4	157,063	19.3	83,046	18.3
50-59 years	137,841	13.8	118,433	14.2	110,208	13.5	61,856	13.6
60-64 years	48,683	4.9	43,574	5.2	40,647	5.0	25,258	5.6
65 years and over	92,919	9.3	87,603	10.5	73,733	9.1	47,512	10.4
Total	**1,001,319**	**100**	**834,676**	**100**	**813,858**	**100**	**454,787**	**100**
Median (years)	38				38			
Female								
Under 18 years	79,580	7.9	58,716	7.0	68,650	8.4	39,122	8.6
18-24 years	42,743	4.3	32,706	3.9	36,161	4.4	19,702	4.3
25-29 years	36,422	3.6	29,473	3.5	29,986	3.7	16,077	3.5
30-39 years	82,471	8.2	70,360	8.4	65,056	8.0	34,606	7.6
40-49 years	84,135	8.4	70,696	8.5	67,855	8.3	36,039	7.9
50-59 years	59,721	6.0	50,449	6.0	48,867	6.0	27,483	6.0
60-64 years	21,310	2.1	19,576	2.3	17,217	2.1	10,942	2.4
65 years and over	44,129	4.4	41,278	4.9	33,409	4.1	20,513	4.5
Total	**450,512**	**45.0**	**373,254**	**44.7**	**367,203**	**45.1**	**204,485**	**45.0**
Median (years)	37				37			
Race								
White	891,443	89.0	739,444	88.6	726,632	89.3	403,045	88.6
Black	59,923	6.0	44,935	5.4	49,175	6.0	28,115	6.2
Asian or Pacific Islander	22,922	2.3	28,690	3.4	15,954	2.0	10,570	2.3
American Indian, Eskimo, or Aleutian	10,707	1.1	8,103	1.0	8,807	1.1	5,233	1.2
Other	16,324	1.6	13,504	1.6	13,290	1.6	7,825	1.7
Total	**1,001,319**	**100**	**834,676**	**100**	**813,858**	**100**	**454,788**	**100**
Ethnicity								
(Hispanic origin)	52,822	5.3	38,177	4.6	44,219	5.4	23,183	5.1
(Not of Hispanic origin)	948,497	94.7	796,499	95.4	769,640	94.6	431,605	94.9
Total	**1,001,319**	**100**	**834,676**	**100**	**813,858**	**100**	**454,788**	**100**

continued

Table 1-34 *continued*

	Person trips (thousands)		Person-miles (millions)		Personal-use vehicle trips (thousands)		Personal-use vehicle-miles (millions)	
	Number	%	Number	%	Number	%	Number	%
Household income								
Less than $25,000	155,555	15.5	112,236	13.4	131,901	16.2	71,556	15.7
$25,000-$39,999	200,981	20.1	148,185	17.8	175,186	21.5	98,074	21.6
$40,000-$49,999	166,699	16.6	125,296	15.0	144,160	17.7	78,294	17.2
$50,000-$59,999	143,946	14.4	118,691	14.2	117,579	14.4	66,363	14.6
$60,000-$74,999	134,348	13.4	118,169	14.2	106,083	13.0	61,169	13.5
$75,000-$99,999	104,698	10.5	102,112	12.2	79,397	9.8	45,406	10.0
$100,000 or more	95,092	9.5	109,987	13.2	59,553	7.3	33,925	7.5
Household type								
Family household	840,438	83.9	693,794	83.1	692,146	85.0	388,534	85.4
Married-couple household	726,982	72.6	606,630	72.7	597,863	73.5	335,980	73.9
With children under 18 years	379,139	37.9	302,958	36.3	313,451	38.5	172,014	37.8
Female householder	76,942	7.7	60,665	7.3	62,583	7.7	35,023	7.7
With children under 18 years	43,389	4.3	31,963	3.8	35,986	4.4	19,421	4.3
Male householder	36,515	3.6	26,499	3.2	31,700	3.9	17,531	3.9
With children under 18 years	13,226	1.3	9,845	1.2	11,207	1.4	6,583	1.4
Nonfamily household	160,881	16.1	140,881	16.9	121,712	15.0	66,254	14.6
Educational attainment (Persons 16 years and over)								
Less than high school graduate	68,338	7.9	48,533	6.6	59,159	8.6	33,428	8.7
High school graduate	219,549	25.5	165,361	22.6	187,762	27.2	105,957	27.6
Some college, no degree	182,146	21.2	146,379	20.0	153,399	22.3	86,304	22.5
Associate's degree	58,431	6.8	46,401	6.3	49,081	7.1	26,264	6.8
Bachelor's degree	193,651	22.5	181,233	24.8	145,438	21.1	79,779	20.8
Some grad school or grad degree	137,513	16.0	144,155	19.7	94,221	13.7	52,678	13.7
Total	**859,629**	**100**	**732,062**	**100**	**689,060**	**100**	**384,409**	**100**
Activity status (Persons 16 years and over)								
Working full time	547,232	63.7	470,855	64.3	428,319	62.2	228,969	59.6
Retired	95,039	11.1	88,837	12.1	77,921	11.3	52,589	13.7
Other	217,357	25.3	172,371	23.5	182,820	26.5	102,851	26.8
Total	**859,629**	**100**	**732,062**	**100**	**689,060**	**100**	**384,409**	**100**

NOTE: This table excludes travel outside the United States. Numbers and percents may not add to totals due to rounding.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, 1995 American Travel Survey data.

Table 1-35: U.S. Air Carrier Aircraft Departures, Enplaned Revenue Passengers, and Enplaned Revenue Tons

	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
AIRCRAFT DEPARTURES														
Total performed[a]	**4,555,516**	**5,156,848**	**5,505,659**	**6,641,681**	**6,545,000**	**6,606,609**	**7,193,841**	**7,513,232**	**8,030,530**	**8,204,674**	**8,095,888**	**8,248,269**	**8,605,486**	**8,951,773**
Total scheduled	**4,530,535**	**5,204,564**	**5,591,596**	**6,758,571**	**7,024,412**	**6,703,670**	**7,058,097**	**7,359,093**	**7,920,467**	**8,064,653**	**7,907,554**	**8,094,020**	**8,432,940**	**12,452,678**
Large hubs														
Performed	2,437,958	2,887,239	3,439,446	4,167,868	4,114,950	4,078,211	4,480,575	4,756,589	5,162,534	5,257,541	5,266,560	5,416,158	5,645,179	5,888,557
Scheduled	2,409,874	2,905,923	3,487,660	4,237,466	4,312,032	4,144,325	4,443,937	4,713,178	5,147,875	5,243,646	5,219,161	5,405,728	5,570,419	9,494,118
Medium hubs														
Performed	902,652	1,048,726	1,185,008	1,394,833	1,256,306	1,301,977	1,310,322	1,471,377	1,439,639	1,425,280	1,430,537	1,429,730	1,499,243	1,572,495
Scheduled	899,543	1,058,438	1,201,540	1,417,762	1,352,515	1,312,257	1,268,316	1,398,144	1,387,833	1,356,162	1,352,944	1,345,197	1,404,482	1,507,479
Small hubs														
Performed	640,589	598,559	514,176	669,450	689,518	771,529	841,685	710,569	738,231	754,914	695,841	714,920	746,625	777,318
Scheduled	644,133	608,738	524,048	679,103	858,429	783,305	794,279	685,421	711,947	722,170	660,685	674,812	770,092	758,396
Nonhubs														
Performed	574,317	622,324	367,029	409,530	484,226	454,892	561,259	574,697	690,126	766,939	702,950	687,461	714,439	713,403
Scheduled	576,985	631,465	378,348	424,240	501,436	463,783	551,565	562,350	672,812	742,675	674,764	668,283	687,947	692,685
ENPLANED REVENUE PASSENGERS[b]	**196,782,144**	**281,408,852**	**363,341,497**	**438,544,001**	**428,319,248**	**447,625,988**	**468,313,029**	**508,458,194**	**526,055,483**	**558,183,741**	**568,615,687**	**588,335,318**	**610,628,716**	**638,902,993**
Large hubs	133,975,900	197,679,376	264,507,144	317,595,099	313,375,097	319,582,090	340,048,661	372,731,005	392,601,890	417,339,694	426,246,423	442,402,443	458,665,099	478,845,117
Medium hubs	36,539,613	51,664,627	65,770,376	80,466,373	72,985,169	80,800,955	79,032,913	88,601,244	85,929,285	89,018,764	90,779,705	91,755,793	96,394,866	101,986,095
Small hubs	19,406,607	23,393,324	24,240,726	30,771,383	31,224,974	36,879,632	37,334,956	34,443,996	33,561,098	37,122,974	36,298,979	37,675,305	38,644,557	40,116,465
Nonhubs	6,860,024	8,671,525	8,823,251	9,711,146	10,734,008	10,363,311	11,896,499	12,681,949	13,963,210	14,702,309	15,290,580	16,501,777	16,924,194	17,955,316
ENPLANED REVENUE TONS[c]	**3,661,061**	**5,088,313**	**4,024,470**	**6,298,824**	**6,417,504**	**6,736,309**	**8,203,090**	**8,718,082**	**9,365,017**	**10,333,298**	**13,520,228**	**14,083,769**	**14,911,847**	**14,992,340**
Freight														
Large hubs	2,265,665	3,008,311	2,047,988	3,001,217	2,960,604	3,067,778	3,678,851	4,025,517	4,402,327	4,653,189	5,691,363	6,208,629	5,993,061	6,661,817
Medium hubs	358,044	414,325	469,057	1,446,744	1,507,017	1,633,136	1,857,865	2,022,282	1,950,318	2,169,411	3,855,449	3,897,242	4,382,712	4,450,393
Small hubs	99,133	73,795	48,127	191,358	222,247	267,619	516,199	432,680	541,062	755,232	963,093	1,019,615	1,053,050	930,518
Nonhubs	41,922	65,756	35,855	93,407	164,645	85,145	330,973	321,896	310,772	469,962	653,542	659,028	638,894	647,946
Total freight	**2,764,763**	**3,562,187**	**2,601,027**	**4,732,726**	**4,854,513**	**5,053,678**	**6,383,887**	**6,802,375**	**7,204,479**	**8,047,795**	**11,163,448**	**11,784,514**	**12,067,717**	**12,690,673**
Mail														
Large hubs	677,179	1,091,059	1,082,567	1,146,589	1,095,019	1,201,545	1,320,176	1,406,910	1,546,568	1,630,445	1,699,154	1,662,643	2,183,127	1,649,611
Medium hubs	151,498	255,929	268,179	292,899	321,041	321,051	324,441	344,200	442,814	466,583	473,577	482,710	502,096	503,965
Small hubs	48,486	148,116	59,917	108,656	126,070	144,918	152,692	136,111	136,008	157,137	138,818	127,748	126,793	108,582
Nonhubs	19,134	31,021	12,781	17,954	20,861	15,117	21,894	28,485	35,149	31,338	45,232	26,154	32,114	39,508
Total mail	**896,298**	**1,526,125**	**1,423,443**	**1,566,098**	**1,562,991**	**1,682,632**	**1,819,203**	**1,915,706**	**2,160,538**	**2,285,503**	**2,356,781**	**2,299,255**	**2,844,130**	**2,301,666**

[a] Total performed includes scheduled departures performed minus those scheduled deaprtures that did not occur plus unscheduled service.

[b] The number of persons receiving air transportation from an air carrier for which renumeration is received by the carrier, excluding persons receiving reduced rate charges, such as air carrier employees, infants, and others (except ministers of religion, elderly individuals, and handicapped individuals).

[c] The number of short tons of freight transported by an air carrier aboard an aircraft.

NOTES:

Data are for all scheduled and nonscheduled service by large certificated U.S. air carriers at all airports served within the 50 states, the District of Columbia, and other U.S. areas designated by the Federal Aviation Administration. Not all scheduled service is actually performed. Moreover, for several years, total performed departures exceed total scheduled departures because nonscheduled departures are included in the totals. Prior to 1993, all scheduled and some nonscheduled enplanements for certificated air carriers were included; no enplanements were included for air carriers offering charter service only. Prior to 1990, freight includes both freight and express shipments, and mail includes priority and nonpriority U.S. mail and foreign mail; beginning in 1990, only aggregate numbers are reported.

Large certificated air carriers operate aircraft with seating capacity of more than 60 seats or a maximum payload capacity of more than 18,000 pounds and hold Certificates of Public Convenience and Necessity issued by the U.S. Department of Transportation authorizing the performance of air transportation. Data for commuter, intrastate, and foreign-flag air carriers are not included.

Air traffic hubs are designated as geographical areas based on the percentage of total passengers enplaned in the area. A hub may have more than one airport in it. (This definition of hub should not be confused with the definition used by the airlines in describing their "hub-and-spoke" route structures) Individual communities fall into four hub classifications as determined by each community's percentage of total enplaned revenue passengers in all services and all operations of U.S. certificated route carriers within the 50 states, the District of Columbia, and other U.S. areas. Classifications are based on the percentage of total enplaned revenue passengers for each year according to the following: one percent or more = large, 0.25 to 0.9999 percent = medium, 0.05 to 0.249 percent = small, less than 0.05 = nonhub.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, *Airport Activity Statistics of Certified Route Air Carriers* (Washington, DC: Annual issues), tables 2-5.

Table 1-36: Passengers Boarded at the Top 50 U.S. Airports[a]

	Rank	2000 total enplaned passengers	Rank	1990 total enplaned passengers	Percent change 1990-00
Atlanta, GA (Hartsfield Intl.)	1	38,255,778	3	22,665,665	69
Chicago, IL (O'Hare Intl.)	2	30,888,464	1	25,636,383	20
Dallas/Ft. Worth, TX (Dallas/Ft. Worth Intl.)	3	27,841,040	2	22,899,267	22
Los Angeles, CA (Los Angeles Intl.)	4	25,109,993	4	18,438,056	36
Denver, CO (Denver Intl.)	5	17,643,261	6	11,961,839	47
Phoenix, AZ (Phoenix Sky Harbor Intl.)	6	17,239,215	7	10,727,494	61
Detroit, MI (Wayne County)	7	16,929,968	9	9,903,078	71
Las Vegas, NV (McCarran Intl.)	8	16,738,909	18	7,796,218	115
Minneapolis, MN (Minneapolis-St. Paul Intl.)	9	16,710,197	16	8,837,228	89
San Francisco, CA (San Francisco Intl.)	10	16,664,399	5	13,474,929	24
Houston, TX (George Bush Intercontinental)	11	15,814,709	20	7,543,899	110
Newark, NJ (Newark)	12	15,205,447	10	9,853,925	54
St. Louis, MO (Lambert-St.Louis Muni.)	13	15,101,246	13	9,332,091	62
Orlando, FL (Orlando Intl.)	14	13,465,706	19	7,677,769	75
Seattle, WA (Seattle-Tacoma Intl.)	15	13,308,253	21	7,385,594	80
Miami, FL (Miami Intl.)	16	12,654,506	14	9,226,103	37
Boston, MA (Logan Intl.)	17	11,505,983	12	9,549,585	20
New York, NY (La Guardia)	18	11,425,705	8	10,725,465	7
Philadelphia, PA (Philadelphia Intl.)	19	10,973,074	24	6,970,820	57
New York, NY (John F. Kennedy Intl.)	20	10,648,410	11	9,687,068	10
Charlotte, NC (Douglas Muni.)	21	10,377,837	22	7,076,954	47
Cincinnati, OH (Greater Cincinnati)	22	9,962,765	32	3,907,625	155
Baltimore, MD (Baltimore-Washington Intl.)	23	8,979,425	29	4,420,425	103
Salt Lake City, UT (Salt Lake City Intl.)	24	8,700,973	25	5,388,178	61
Honolulu, HI (Honolulu Intl.)	25	8,684,893	15	9,002,217	-4
Pittsburgh, PA (Greater Pittsburgh)	26	8,650,976	17	7,912,394	9
San Diego, CA (San Diego Intl.-Lindbergh)	27	7,624,519	26	5,260,907	45
Tampa, FL (Tampa Intl.)	28	7,430,829	27	4,781,020	55
Miami/Ft. Lauderdale, FL (Ft. Lauderdale-Hollywood Intl.)	29	7,140,518	34	3,875,357	84
Washington, DC (Reagan National)	30	6,983,212	23	7,034,693	-1
Chicago, IL (Midway)	31	6,972,213	37	3,547,040	97
Washington, DC (Dulles Intl.)	32	6,649,323	28	4,448,592	49
Portland, OR (Portland Intl.)	33	6,558,859	42	3,025,345	117
Cleveland, OH (Hopkins Intl.)	34	6,154,094	35	3,836,050	60
San Jose, CA (San Jose Muni.)	35	6,044,278	41	3,128,393	93
Kansas City, MO (Kansas City Intl.)	36	5,748,758	40	3,358,116	71
Oakland, CA (Oakland Metropolitan Intl.)	37	5,126,648	44	2,670,788	92
Memphis, TN (Memphis Intl.)	38	4,977,238	33	3,887,208	28
Raleigh-Durham, NC (Raleigh-Durham)	39	4,838,779	30	4,361,369	11
San Juan, PR (Luis Munoz Marin Intl.)	40	4,834,298	36	3,618,090	34

continued

Table 1-36 *continued*

	Rank	2000 total enplaned passengers	Rank	1990 total enplaned passengers	Percent change 1990-00
New Orleans, LA (New Orleans Intl.)	41	4,822,265	39	3,361,062	43
Nashville, TN (Metropolitan)	42	4,365,127	38	3,404,243	28
Houston, TX (William P. Hobby)	43	4,322,108	31	3,972,327	9
Sacramento, CA (Sacramento International)	44	3,873,003	56	1,737,096	123
Los Angeles, CA (Orange County)	45	3,828,324	51	2,203,700	74
Austin, TX (Robert Muller Muni.)	46	3,635,209	53	2,054,955	77
Indianapolis, IN (Indianapolis Intl.)	47	3,629,716	47	2,601,839	40
Dallas, TX (Love Field)	48	3,594,539	43	2,882,836	25
Hartford/Springfield/Westfield CT (Bradley Intl.)	49	3,508,023	50	2,312,455	52
San Antonio, TX (San Antonio Intl.)	50	3,466,266	48	2,593,896	34
Total top 50		**535,609,278**		**361,953,646**	
All airports		**638,902,993**		**438,544,001**	

[a] Rank order by total enplaned passengers on large certificated U.S. air carriers, scheduled and nonscheduled operations, at all airports served within the 50 states, the District of Columbia, and other U.S. areas designated by the Federal Aviation Administration. Prior to 1993, all scheduled and some nonscheduled enplanements for certificated air carriers were included; no enplanements were included for air carriers offering charter service only.

Large certificated air carriers hold Certificates of Public Convenience and Necessity issued by the U.S. Department of Transportation authorizing the performance of air transportation. Large certificated air carriers operate aircraft with seating capacity of more than 60 seats or a maximum payload capacity of more than 18,000 pounds. Data for commuter, intrastate, and foreign-flag air carriers are not included.

NOTES: The following airports appeared in the top 50 ranking in 1990 but were not among the top 50 for 2000: Ontario, CA ranked 45th (2,640,734); West Palm Beach, FL ranked 46th (2,609,138); Albuquerque, NM ranked 49th (2,384,647); and Hartford, CT ranked 50th (2,312,455).

SOURCES:
1990: U.S. Department of Transportation, Federal Aviation Administration and Research and Special Programs Administration, *Airport Activity Statistics of Certificated Route Air Carriers, 12 Months Ending December 31, 1990* (Washington, DC: 1991), tables 3 and 4.
2000: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, *Airport Activity Statistics of Certificated Air Carriers: Summary Tables,Twelve Months Ending December 31, 2000* (Washington, DC: 2001), tables 3 and 4.

Table 1-37: Air Passenger Travel Arrivals in the United States from Selected Foreign Countries (Thousands)

	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Flag of carrier													
United States	6,502	10,031	11,798	19,145	18,910	20,537	21,940	23,291	24,582	25,148	26,744	27,390	27,462
Foreign	6,144	10,231	12,357	17,269	16,554	18,390	19,618	20,527	22,328	24,704	27,571	28,791	30,324
Total arriving passengers	**12,646**	**20,262**	**24,156**	**36,414**	**35,464**	**38,927**	**41,558**	**43,818**	**46,910**	**49,853**	**54,315**	**56,181**	**57,785**
Country of embarkation[a]													
Australia	106	227	277	495	561	598	591	551	581	622	618	613	670
Bahama Islands	758	1,123	1,503	1,679	1,436	1,341	1,370	1,424	1,433	1,487	1,530	1,396	1,337
Barbados	76	135	216	228	197	191	208	196	222	212	203	195	197
Belgium	144	242	281	417	366	357	408	377	379	407	589	715	730
Bermuda	398	497	434	487	430	405	436	447	426	363	425	407	384
Brazil	212	300	352	584	635	645	711	878	1,112	1,176	1,388	1,377	1,154
Canada[b]	N	N	N	6,870	6,263	6,546	6,843	6,812	7,417	8,501	8,895	[R]9,613	9,926
China/Taiwan	50	113	206	325	404	447	606	830	972	1,017	1,068	1,080	1,170
Colombia	173	315	279	286	305	343	389	443	481	499	586	606	649
Denmark	222	267	241	313	279	295	285	267	221	236	252	225	223
Dominican Republic	336	468	606	948	849	951	1,027	1,070	1,136	1,168	1,168	1,251	1,368
France	512	689	955	1,777	1,600	1,926	1,877	2,017	2,045	2,178	2,323	2,523	2,591
Germany	622	1,175	1,582	2,466	2,444	2,797	2,922	2,883	3,125	3,173	3,545	3,558	3,491
Grand Cayman	25	121	173	273	256	229	185	294	314	323	328	370	335
Greece	121	208	187	132	83	146	165	201	220	235	186	192	191
Haiti	91	133	192	233	217	154	200	137	314	303	289	293	327
Hong Kong	98	228	270	356	397	437	511	558	658	668	589	592	650
Ireland	220	220	274	448	418	569	582	660	642	721	716	775	950
Israel	84	189	294	204	202	231	293	332	412	483	482	502	547
Italy	431	537	662	792	716	885	903	953	1,007	1,047	1,097	1,078	1,171

continued

Table 1-37 *continued*

	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Jamaica	457	429	707	975	907	888	982	1,040	1,124	1,136	1,162	1,219	1,209
Japan	1,095	1,624	2,435	4,528	4,510	4,972	4,999	5,149	5,676	6,349	6,736	6,630	6,991
Korea, Republic of	105	234	390	826	827	971	1,070	1,166	1,335	1,514	1,625	1,184	1,240
Mexico	1,626	2,886	2,719	4,313	4,467	4,625	4,778	5,107	4,884	5,591	6,124	6,318	6,576
Netherlands	312	427	583	837	892	1,039	1,297	1,427	1,580	1,774	2,074	2,213	2,318
Netherland Antilles	213	327	407	388	353	290	360	390	339	305	368	382	371
Panama Republic	97	150	180	153	175	177	201	221	225	229	227	267	308
Philippines	108	194	145	246	261	315	318	375	397	379	410	275	331
Spain	306	312	419	558	520	659	600	578	604	618	675	732	734
Switzerland	236	312	452	616	525	549	603	676	733	790	910	1,068	1,026
United Kingdom	1,549	2,973	3,460	5,166	4,793	5,651	6,006	6,087	6,648	7,131	7,935	8,640	8,780
Venezuela	205	533	248	458	510	576	653	702	786	659	709	810	794
Total	**10,988**	**17,588**	**21,129**	**38,377**	**36,798**	**40,205**	**42,379**	**44,248**	**47,448**	**51,294**	**55,232**	**R57,099**	**58,739**

KEY: N = data do not exist; R = revised.

[a] Country where passenger boarded a direct flight to the United States.

[b] Canadian figure represents number of revenue passengers on scheduled commercial and charter flights. Does not include foreign (non-Canadian, non-U.S.) scheduled carriers.

NOTES: Includes passengers on international commercial flights arriving at U.S. airports and travelers between U.S. airports in the 50 states, Puerto Rico, Guam, or the Virgin Islands, and other U.S. territories.

Data compiled from flight reports required by the U.S. Immigration and Naturalization Service. Table includes a selected sample of countries of embarkation for passengers arriving in the United States.

Because two different data sources are used, the total number of departing passengers may be less than the total for "country of embarkation" listed here.

SOURCES: 1975-94: U.S. Department of Transportation, Research and Special Programs Administration, Volpe National Transportation Systems Center, *U.S. International Air Travel Statistics* (Cambridge, MA: Annual issues), table IIa.

1995: U.S. Department of Commerce, International Trade Administration, *U.S. International Air Passenger Statistics Report, Calendar Year 1995* (Washington, DC: 1996), table IIa.

1996-99: Ibid., *U.S. International Air Travel Statistics Report* (Washington, DC: Annual issues), table IIa. Canada: Statistics Canada, *Air Carrier Traffic at Canadian Airports* (Canada: Annual issues) and personal communication, Aug. 20, 2001.

Table 1-38: Air Passenger Travel Departures from the United States to Selected Foreign Countries (Thousands)

	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Flag of carrier													
United States	5,912	9,369	10,696	17,628	17,530	18,858	20,232	21,355	22,231	22,901	24,302	24,513	25,457
Foreign	6,141	9,886	11,791	16,418	15,756	17,353	18,022	18,993	20,795	22,884	25,382	26,350	28,399
Total departing passengers	**12,053**	**19,256**	**22,487**	**34,046**	**33,286**	**36,211**	**38,254**	**40,349**	**43,026**	**45,785**	**49,684**	**50,863**	**53,856**
Country of debarkation[a]													
Australia	103	245	232	540	581	609	588	522	560	614	606	607	686
Bahama Islands	704	1,006	1,151	1,279	1,128	1,005	1,046	963	1,024	994	983	955	1,027
Barbados	74	126	204	230	199	185	207	208	217	210	200	196	202
Belgium	134	231	249	395	318	355	372	334	340	380	513	622	713
Bermuda	372	467	389	277	237	217	247	242	199	196	215	207	206
Brazil	206	291	322	560	592	659	696	826	1,024	1,135	1,292	1,297	1,134
Canada[b]	N	N	N	6,870	6,263	6,546	6,798	6,764	7,405	8,477	8,890	[R]9,647	9,913
China/Taiwan	41	90	187	337	447	481	616	803	891	945	939	934	975
Colombia	171	299	294	277	294	324	353	415	461	467	567	588	585
Denmark	188	254	254	307	239	266	272	254	229	227	259	217	214
Dominican Republic	322	443	528	896	780	881	949	980	995	1,057	1,070	1,108	1,263
France	470	635	894	1,626	1,523	1,769	1,759	1,896	1,868	2,021	2,147	2,289	2,544
Germany	649	1,178	1,539	2,339	2,298	2,627	2,788	2,785	2,883	2,978	3,178	3,210	3,364
Grand Cayman	26	112	161	250	238	196	244	259	264	285	290	305	291
Greece	123	190	210	129	88	150	150	184	194	206	192	181	170
Haiti	81	124	169	201	178	139	180	118	292	288	284	295	315
Hong Kong	59	152	238	310	369	474	477	545	640	651	610	621	621
Ireland	163	212	233	311	263	316	324	380	409	449	488	554	743
Israel	105	186	255	259	249	294	317	367	426	492	499	488	515
Italy	409	495	660	731	694	873	878	918	955	1,006	1,055	1,041	1,101

continued

Table 1-38 *continued*

	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Jamaica	416	382	607	888	821	796	887	909	987	988	1,018	1,018	1,086
Japan	1,183	1,602	2,255	4,471	4,431	4,795	4,757	4,954	5,452	6,187	6,796	6,487	6,709
Korea, Republic of	60	186	333	723	759	887	961	1,082	1,252	1,382	1,461	1,032	1,101
Mexico	1,525	2,886	2,671	4,136	4,230	4,307	4,371	4,632	4,568	5,133	5,613	5,771	6,217
Netherlands	304	409	562	777	881	965	1,150	1,319	1,444	1,636	1,920	1,933	2,009
Netherland Antilles	184	282	395	377	341	309	347	368	295	288	319	340	335
Panama Republic	100	142	209	183	189	186	194	211	214	221	240	272	299
Philippines	81	160	165	195	194	241	249	228	281	275	306	218	272
Spain	260	273	397	540	513	637	576	553	573	577	615	669	708
Switzerland	224	306	434	600	527	543	593	657	712	760	811	906	983
United Kingdom	1,446	2,840	3,322	4,903	4,594	5,245	5,682	5,918	6,372	6,693	7,475	8,143	8,717
Venezuela	198	518	245	444	488	565	641	686	778	644	698	782	793
Total	**10,381**	**16,722**	**19,764**	**36,361**	**34,946**	**37,842**	**39,669**	**41,280**	**44,204**	**47,862**	**51,549**	**R52,933**	**55,811**

KEY: N = data do not exist; R = revised.

[a] Country where passenger deboarded a direct flight from the United States.

[b] Canadian figure represents number of revenue passengers on scheduled commercial and charter flights. Does not include foreign (non-Canadian, non-U.S.) scheduled carriers.

NOTES: Includes passengers on international commercial flights departing U.S. airports, and travelers between U.S. ports in the 50 states, Puerto Rico, Guam, or the Virgin Islands, and other U.S. territories. Data compiled from flight reports required by the U.S. Immigration and Naturalization Service. Table includes a selected sample of countries of debarkation for passengers boarding in the United States. Because two different data sources are used, the total number of departing passengers may be less than the total for "country of debarkation" listed here.

SOURCES: 1975-94: U.S. Department of Transportation, Research and Special Programs Administration, Volpe National Transportation Systems Center, U*.S. International Air Travel Statistics* (Cambridge, MA: Annual issues), table IId.

1995: U.S. Department of Commerce, International Trade Administration, *U.S. International Air Passenger Statistics Report, Calendar Year 1995* (Washington, DC: 1996), table IId.

1996-99: Ibid., *U.S. International Air Travel Statistics Report* (Washington, DC: Annual issues), table IId. Canada: Statistics Canada, *Air Carrier Traffic at Canadian Airports* (Canada: Annual issues) and personal communication, Aug. 20, 2001.

Table 1-39: U.S.-Canadian Border Land-Passenger Gateways: 2000

	Entering the U.S.
All U.S.-Canadian Land Gateways	
All personal vehicle passengers	90,046,948
All personal vehicles	36,915,053
All bus passengers	4,872,943
All pedestrians	585,191
All train passengers	269,502
All buses	189,264
Personal vehicle passengers – top 5 gateways	
Detroit, MI	21,723,936
Buffalo-Niagara Falls, NY	16,523,141
Blaine, WA	8,234,557
Port Huron, MI	6,865,507
Sault Ste. Marie, MI	3,881,423
Personal vehicles – top 5 gateways	
Detroit, MI	8,360,352
Buffalo-Niagara Falls, NY	7,657,846
Blaine, WA	3,332,147
Port Huron, MI	2,332,469
Calias, ME	1,414,327
Bus passengers – top 5 gateways	
Buffalo-Niagara Falls, NY	1,973,016
Detroit, MI	857,607
Blaine, WA	441,320
Champlain-Rouses Point, NY	317,205
Port Huron, MI	155,153
Pedestrians – top 5 gateways	
Buffalo-Niagara Falls, NY	280,941
Sumas, WA	57,222
Calais, ME	51,033
Portland, ME[a]	29,495
International Falls-Ranier, MN	26,456
Train passengers – top 5 gateways	
Buffalo-Niagara Falls, NY	53,603
Blaine, WA	46,343
Port Huron, MI	40,633
Champlain-Rouses Point, NY	38,459
Skagway, AK	35,253
Buses – top 5 gateways	
Buffalo-Niagara Falls, NY	66,771
Detroit, MI	41,234
Blaine, WA	18,104
Champlain-Rouses Point, NY	11,728
Skagway, AK	8,579

[a] Gateway is a pedestrian/ferry combination crossing.

NOTE: Data reflect all personal vehicles, buses, passengers and pedestrians entering the United States across the U.S.-Canadian border, regardless of nationality.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, special tabulation, August 2001. Based on the following primary data source: U.S. Department of Treasury, U.S. Customs Service, Office of Field Operations, Operations Management Database (Washington, DC: 2000).

Table 1-40: U.S.-Mexican Border Land-Passenger Gateways: 2000

	Entering the U.S.
All U.S.-Mexican Land Gateways	
All personal vehicle passengers	239,794,552
All personal vehicles	91,156,796
All pedestrians	47,089,642
All bus passengers	3,465,916
All buses	270,792
All train passengers	18,254
Personal vehicle passengers - top 5 gateways	
El Paso, TX	48,420,274
San Ysidro, CA	31,025,343
Hildago, TX	21,947,731
Calexico, CA	20,094,460
Brownsville, TX	19,693,130
Personal vehicles - top 5 gateways	
El Paso, TX	16,697,439
San Ysidro, CA	14,106,704
Hildago, TX	8,779,691
Brownsville, TX	7,877,255
Laredo, TX	7,151,127
Pedestrians - top 5 gateways	
Calexico, CA	8,352,324
San Ysidro, CA	7,542,450
El Paso, TX	5,825,155
Laredo, TX	5,492,769
Nogales, AZ	4,677,819
Bus passengers - top 5 gateways	
Otay Mesa, CA	845,775
San Ysidro, CA	783,762
Hildago, TX	648,751
Laredo, TX	608,184
El Paso, TX	155,493
Buses - top 5 gateways	
San Ysidro, CA	101,244
Otay Mesa, CA	47,683
Laredo, TX	34,529
Hildalgo, TX	31,836
Brownsville, TX	16,073
Train passengers - top 5 gateways	
Eagle Pass, TX	5,792
Nogales, AZ	4,752
Tecate, CA	3,418
El Paso, TX	2,188
Calexico East, CA	1,687

NOTE: Data reflect all personal vehicles, buses, passengers and pedestrians entering the United States across the U.S.-Mexican border, regardless of nationality.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, special tabulation, August 2001. Based on the following primary data source: U.S. Department of Treasury, U.S. Customs Service, Office of Field Operations, Operations Management Database (Washington, DC: 2000).

Table 1-41: U.S. Ton-Miles of Freight (Millions)

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Air carrier, domestic, all services[a]	**553**	**1,353**	**2,709**	**3,470**	**4,528**	**5,156**	**9,064**	**8,860**	**9,820**	**10,675**	**11,803**	**12,520**	**12,861**	**13,601**	**R13,840**	**14,202**	**14,983**	**13,288**
Intercity truck	**285,000**	**359,000**	**412,000**	**454,000**	**555,000**	**610,000**	**735,000**	**758,000**	**815,000**	**861,000**	**908,000**	**921,000**	**972,000**	**996,000**	**1,027,000**	**1,093,000**	**U**	**U**
Class I rail[b]	**572,309**	**697,878**	**764,809**	**754,252**	**918,958**	**876,984**	**1,033,969**	**1,038,875**	**1,066,781**	**1,109,309**	**1,200,701**	**1,305,688**	**1,355,975**	**1,348,926**	**1,376,802**	**1,433,461**	**1,465,960**	**U**
Domestic water transportation																		
Coastwise	U	302,546	359,784	315,846	[d]631,149	610,977	479,134	502,133	502,311	448,404	457,601	440,345	408,086	349,843	314,864	292,730	283,872	U
Lakewise	U	75,918	79,416	68,517	61,747	48,184	60,930	55,339	55,785	56,438	58,263	59,704	58,335	62,166	61,654	57,045	57,879	U
Internal	U	109,701	155,816	180,399	227,343	232,708	292,393	289,959	297,639	283,894	297,762	306,329	296,791	294,023	294,896	304,724	302,558	U
Intraport	U	1,638	1,179	1,222	1,596	1,102	1,087	968	950	922	1,293	1,350	1,475	1,378	1,381	1,362	1,490	U
Total domestic water transportation[c]	**U**	**489,803**	**596,195**	**565,984**	**R921,836**	**892,970**	**833,544**	**848,399**	**856,685**	**789,658**	**814,919**	**807,728**	**764,687**	**707,410**	**672,795**	**655,862**	**645,799**	**U**
Oil pipeline	**229,000**	**306,000**	**431,000**	**507,000**	**588,200**	**564,300**	**584,100**	**578,500**	**588,800**	**592,900**	**591,400**	**601,100**	**619,200**	**616,500**	**619,800**	**617,700**	**U**	**U**
TOTAL	**1,562,000**	**1,854,000**	**2,207,000**	**2,285,000**	**2,989,000**	**2,949,000**	**3,196,000**	**3,233,000**	**3,337,000**	**3,364,000**	**3,527,000**	**3,648,000**	**3,725,000**	**3,682,000**	**3,710,000**	**3,814,000**	**U**	**U**

KEY: R = revised; U = data are not available.

[a] Includes freight, express, and mail revenue ton-miles as reported on U.S. DOT Form 41.
[b] Revenue ton-miles.
[c] Excludes intraterritorial traffic, for which ton-miles were not compiled.
[d] Reflects startup between 1975 and 1980 of Alaska pipeline and consequent water transportation of crude petroleum from Alaskan ports to mainland United States for refining.

NOTE: Domestic water transportation numbers may not add to totals due to rounding.

SOURCES:

Air carrier, domestic, all services:
1960-65: Civil Aeronautics Board, *Handbook of Airline Statistics, 1969* (Washington, DC: 1970).
1970-80: Ibid., *Air Carrier Traffic Statistics* (Washington, DC: Annual issues), p. 2, line 3.
1985-2001: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, *Air Carrier Traffic Statistics* (Washington, DC: Annual issues), p. 2, line 3.
Intercity truck:
1960-99: Eno Transportation Foundation, Inc., *Transportation in America, 2000* (Washington, DC: 2001), p. 12.
Class I rail:
1960-2000: Association of American Railroads, *Railroad Facts* (Washington, DC: 2001), p. 27.
Domestic water transportion:
1965-2000: U.S. Army Corps of Engineers, *Waterborne Commerce of the U.S.* (New Orleans, LA: Annual issues), part 5, section 1, table 1-4, and similar tables in earlier editions.
Oil pipeline:
1960-70: Eno Transportation Foundation, Inc., *Transportation in America, 1998* (Washington, DC: 1998), p. 44.
1975: Association of Oil Pipe Lines, *Shifts in Petroleum Transportation* (Washington, DC: Annual issues), table
1980-99: Ibid., *Shifts in Petroleum Transportation* (Washington, DC: Annual issues), table 1.

Table 1-42: Average Length of Haul, Domestic Freight and Passenger Modes (Miles)

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Freight																		
Air carrier	953	943	1,014	1,082	1,052	1,157	1,389	1,346	1,391	R1,347	R1,221	R1,160	R1,181	R1,077	R1,078	1,001	U	U
Truck[a]	272	259	263	286	363	366	391	398	410	407	392	416	426	435	R442	458	U	U
Class I rail	461	503	515	541	616	665	726	751	763	794	817	843	842	851	835	835	843	U
Water																		
Coastwise	1,496	1,501	1,509	1,362	1,915	1,972	1,604	1,705	1,762	1,650	1,652	1,652	1,526	1,330	1,261	1,279	1,251	U
Lakewise	522	494	506	530	536	524	553	535	519	514	508	514	508	507	505	501	506	U
Internal	282	297	330	358	405	435	470	483	479	468	482	494	477	466	472	488	481	U
Intraport	U	U	U	16	17	15	13	13	12	12	16	16	17	15	15	15	16	U
Oil pipeline																		
Crude	325	320	300	633	871	777	R812	R822	R830	R790	R778	R797	779	R781	R767	766	U	U
Petroleum products	269	335	357	516	414	391	R387	R379	R379	R406	R414	R402	R413	R413	R420	418	U	U
Passenger																		
Air carrier, domestic, scheduled	583	614	678	698	736	758	803	806	806	799	787	791	802	817	R812	824	833	842
Bus, intercity	79	94	106	113	125	121	141	143	136	138	138	140	143	144	144	143	U	U
Commuter rail	21	21	22	23	23	24	22	23	23	22	21	24	24	23	R23	23	U	U
Amtrak[b]	N	N	N	236	216	231	273	284	285	281	271	268	257	256	252	248	U	U

KEY: N = data do not exist; R = revised; U = data are not available.

[a] Total Class I and Class II motor carriers of freight (less-than-truckload, specialized carrier for truckload, and others).

[b] Amtrak began operations in 1971. Data are reported for fiscal years.

NOTES: Average length of haul for freight is calculated by dividing ton-miles in the previous table by estimates of tonnage from the various data sources. The calculation of average length of haul for passenger trips varies by mode: for air carrier it is calculated by dividing revenue passenger-miles by revenue passenger enplanements; for commuter rail, intercity bus, and Amtrak it is calculated by dividing passenger-miles by number of passengers.

SOURCES:

Freight:

Air carrier, truck:

Eno Transportation Foundation, Inc., *Transportation In America, 2000* (Washington, DC: 2001), p. 51.

Class I rail:
Association of American Railroads, *Railroad Facts* (Washington, DC: 2001), p. 36.
Water:
U.S. Army Corps of Engineers, *Waterborne Commerce of the United States, Part 5* (New Orleans, LA: Annual issues), section 1, table 1-4
Oil pipeline:
1960-70: Transportation Policy Associates, Washington, DC, personal communication.
1975-99: Eno Transportation Foundation, Inc., *Transportation in America, 2000* (Washington, DC: 2001), p. 51.
Passenger:
Air carrier:
U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, *Air Carrier Traffic Statistics* (Washington, DC: Annual issues).
Intercity bus and commuter rail:
Eno Transportation Foundation, Inc., *Transportation in America, 2000* (Washington, DC: 2001), p. 50.
Amtrak:
1970-85: Amtrak, corporate communication, Jan. 26, 1999.
1990-99: Amtrak, *Amtrak Annual Report* (Washington, DC: 2000), Statistical Appendix, p. III.

Table 1-43: Top U.S. Foreign Trade Freight Gateways by Value of Shipments: 2000 (current $ billions)

	Rank	Exports	Imports	Total
JFK International Airport, (a)	1	56.0	75.5	131.6
Port of Los Angeles, CA (w)	2	16.7	85.1	101.8
Port of Long Beach, CA (w)	3	16.9	81.3	98.2
Port of Detroit, MI (l)	4	49.5	44.9	94.4
San Francisco Airport, CA (a)	5	41.8	46.9	88.7
Port of Laredo, TX (l)	6	39.2	44.4	83.7
Port of New York, NY and NJ (w)	7	19.7	61.2	80.9
Los Angeles International Airport, CA (a)	8	41.7	35.6	77.3
Port of Buffalo-Niagra Falls, NY (l)	9	36.2	33.9	70.1
Port of Huron, MI (l)	10	18.8	40.9	59.7
Chicago, IL (a)	11	20.4	25.4	45.7
Port of Houston, TX (w)	12	18.7	24.6	43.4
Port of El Paso, TX (l)	13	17.5	21.9	39.4
Port of Seattle, WA (w)	14	5.4	26.9	32.3
New Orleans, LA. (a)	15	16.2	15.9	32.0
Port of Charleston, SC (w)	16	11.3	20.2	31.5
Port of Norfolk Harbor, VA (w)	17	11.1	14.1	25.2
Port of Oakland, CA (w)	18	9.6	15.5	25.1
Cleveland, OH (a)	19	11.8	12.7	24.5
Miami International Airport, FL (a)	20	15.9	7.7	23.6
Anchorage, AK (a)	21	3.5	19.7	23.2
Port of Baltimore, MD (w)	22	5.3	15.3	20.6
Dallas-Fort Worth, TX (a)	23	10.1	10.2	20.4
Port of Tacoma, WA (w)	24	4.4	15.5	19.8
Port of Otay Mesa Station, CA (l)	25	8.1	10.7	18.8
Port of New Orleans, LA (w)	26	7.6	11.2	18.8
Port of Miami, FL (w)	27	8.4	9.1	17.5
Port of Champlain-Rouses Pt., NY (l)	28	6.0	11.3	17.3
Atlanta, GA (a)	29	8.4	8.7	17.2
Port of Savannah, GA (w)	30	5.9	10.5	16.3
Port of Nogales, AZ (l)	31	5.3	8.3	13.6
Port of Hildago, TX (l)	32	6.2	6.4	12.6
Port of Blaine, WA (l)	33	5.6	6.7	12.3
Port of Brownsville-Cameron, TX (l)	34	6.2	5.9	12.1
Port of Alexandria Bay, NY (l)	35	4.6	7.4	12.0
Port of South Louisiana, LA (w)	36	7.1	4.0	11.1
Port of Beaumont, TX (w)	37	1.0	9.6	10.6
Newark N.J. (a)	38	3.9	6.7	10.6
Port of Pembina, ND (l)	39	5.3	5.2	10.6
Port of Port Everglades, FL (w)	40	4.7	5.8	10.5
Port of Portland, OR (w)	41	3.0	7.5	10.5
Port of Corpus Christi, TX (w)	42	1.6	8.7	10.3
Port of Jacksonville, FL (w)	43	1.9	8.4	10.3
Boston Logan Airport, MA (a)	44	5.9	4.4	10.3
Port of Philadelphia, PA (w)	45	0.5	9.5	10.0
Port of Morgan City, LA (w)	46	0.1	9.3	9.4
Seattle-Tacoma International Airport, WA (a)	47	3.7	4.8	8.5
Port of Calexico-East, CA (l)	48	3.5	4.8	8.3
Port of Sweetgrass, MT (l)	49	3.4	4.4	7.8
Port of Highgate Springs-Alburg, VT (l)	50	3.0	4.6	7.6
Total top 50 gateways		618.9	989.1	1,608.1

KEY: a = air; l = land w = water.

NOTES: All data: Trade levels reflect the mode of transportation as a shipment enters or exits at a border port. Flows through individual ports are based on reported data collected from U.S. trade documents. Trade does not include low-value shipments. (In general, these are imports valued at less than $1,250 and exports that are valued at less than $2,500.

Air: Data for all air gateways include a low level (generally less than 2%-3% of the total value) of small user-fee airports located in the same region. Air gateways not identified by airport name (e.g., Chicago, IL, and others) include major airport(s) in that geographic area in addition to small regional airports. In addition, due to Bureau of Census confidentiality regulations, data for courier operations are included in the airport totals for JFK International Airport, New Orleans, Los Angeles, Cleveland, Chicago, Miami, and Anchorage.

Water: Data should be considered preliminary.

Numbers may not add to totals due to rounding.

SOURCES:
(a) Air: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division, special tabulation, August 2001.
(w) Water: U.S. Department of Transportation, Maritime Administration, Office of Statistical and Economic Analysis, personal communication, Sept. 5, 2001.
(l) Land: U.S. Department of Transportation, Bureau of Transportation Statistics, Transborder Surface Freight Data, 2001.

Table 1-44: U.S.-Canadian Border Land-Freight Gateways: 2000

	Number of truck or railcar crossings
Truck	
Total U.S.-Canadian border	**7,048,128**
Total top 5 gateways	**4,714,339**
Detroit, MI	1,769,389
Buffalo-Niagara Falls, NY	1,198,085
Port Huron, MI	839,200
Blaine, WA	516,829
Champlain-Rouses Point, NY	390,836
Rail	
Total U.S.-Canadian border	**1,594,837**
Total top 5 gateways	**1,169,034**
Port Huron, MI	425,211
Detroit, MI	237,968
Buffalo-Niagara Falls, NY	181,462
International Falls, MN	171,551
Portal, ND	152,842

NOTES:

Truck: Data represent the number of truck crossings, not the number of unique vehicles. Data are for both loaded and empty trucks.

Rail: Data includes both loaded and unloaded railcars.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, special tabulation, August 2001. Based on the following primary data source: U.S. Department of Treasury, U.S. Customs Service, Office of Field Operations, Operations Management Database, special tabulation (Washington, DC: 2000).

Table 1-45: U.S.-Mexican Border Land-Freight Gateways: 2000

	Number of truck or railcar crossings
Truck	
Total U.S.-Mexican border	**4,525,579**
Total top 5 gateways	**3,575,207**
Laredo, TX	1,493,073
El Paso, TX	720,406
Otay Mesa/San Ysidro, CA	688,340
Hildago, TX	374,150
Brownsville, TX	299,238
Rail	
Total U.S.-Mexican border	**571,825**
Total top 5 gateways	**562,710**
Laredo, TX	243,369
Brownsville, TX	139,803
Eagle Pass, TX	94,113
Nogales, AZ	50,602
El Paso, TX	34,823

NOTES:

Truck: Data represent the number of truck crossings, not the number of unique vehicles. Data are for both loaded and empty trucks.

Rail: Data includes both loaded and unloaded railcars.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, special tabulation, August 2001. Based on the following primary data source: U.S. Department of Treasury, U.S. Customs Service, Office of Field Operations, Operations Management Database, special tabulation (Washington, DC: 2000).

Table 1-46: U.S. Waterborne Freight (Million short tons)

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
TOTAL	**1,099.9**	**1,272.9**	**1,531.7**	**1,695.0**	**1,998.9**	**1,788.4**	**2,163.9**	**2,092.2**	**2,132.1**	**2,128.2**	**2,214.7**	**2,240.4**	**2,284.1**	**2,333.1**	**2,339.5**	**2,322.6**	**2,461.6**
Foreign	339.3	443.7	581.0	748.7	921.4	774.3	1,041.6	1,013.6	1,037.5	R1,060.0	1,115.7	1,147.4	1,183.4	1,220.6	1,245.4	1,260.8	1,391.8
Imports	211.3	269.8	339.3	476.6	517.5	412.7	600.0	555.4	586.7	648.8	719.5	672.7	732.6	788.3	840.7	860.8	976.8
Exports	128.0	173.9	241.6	272.1	403.9	361.6	441.6	458.2	450.8	411.3	396.2	474.7	450.8	432.3	404.7	400.0	415.0
Domestic	760.6	829.2	950.7	946.3	1,077.5	1,014.1	1,122.3	1,078.6	1,094.6	1,068.2	1,099.0	1,093.0	1,100.7	1,112.5	1,094.1	1,061.8	1,069.8
Inland	291.1	369.6	472.1	503.9	535.0	534.7	622.6	600.4	621.0	607.3	618.4	620.3	622.1	630.6	625.0	624.6	628.4
Coastal	209.2	201.5	238.4	231.9	329.6	309.8	298.6	294.5	285.1	271.7	277.0	266.6	267.4	263.1	249.6	228.8	226.9
Great Lakes	155.1	153.7	157.1	129.3	115.1	92.0	110.2	103.4	107.4	109.9	114.8	116.1	114.9	122.7	122.2	113.9	114.4
Intraport	104.2	102.9	81.5	78.3	94.2	74.3	86.4	75.6	76.8	74.4	82.9	83.1	89.0	89.8	90.1	88.7	94.6
Intraterritory	1.0	1.5	1.6	2.9	3.6	3.4	4.5	4.6	4.2	5.0	5.9	6.9	7.3	6.3	7.2	5.9	5.5

KEY: R = revised.

NOTES: Beginning in 1996, shipments of fish are excluded from domestic tonnage totals.
Numbers may not add due to rounding.

SOURCES: 1960-2000: U.S. Army Corps of Engineers, *Waterborne Commerce of the United States* (New Orleans, LA: March 2002). Part 5, tables 1-3 and 1-6.

Table 1-47: Tonnage of Top 50 U.S. Water Ports, Ranked by Total Tons[a] (Millions)

	2000		1990		
	Rank	Total tons	Rank	Total tons	% change 1990-2000
South Louisiana, LA	1	217.8	1	194.2	12.1
Houston, TX	2	191.4	3	126.2	51.7
New York, NY and NJ	3	138.7	2	140.0	-1.0
New Orleans, LA	4	90.8	6	62.7	44.7
Corpus Christi, TX	5	83.1	7	62.0	34.0
Beaumont, TX	6	82.7	23	26.7	209.2
Huntington, WV	7	76.9	34	17.3	344.1
Long Beach, CA	8	70.1	10	52.4	33.8
Baton Rouge, LA	9	65.6	5	78.1	-16.0
Texas City, TX	10	61.6	12	48.1	28.1
Plaquemine, LA	11	59.9	8	56.6	5.9
Lake Charles, LA	12	55.5	16	40.9	35.8
Mobile, AL	13	54.2	15	41.1	31.7
Pittsburgh, PA	14	53.9	19	35.5	51.9
Los Angeles, CA	15	48.2	13	46.4	4.0
Valdez, AK	16	48.1	4	96.0	-49.9
Tampa, FL	17	46.5	11	51.6	-9.9
Philadelphia, PA	18	43.9	14	41.8	4.8
Norfolk Harbor, VA	19	42.4	9	53.7	-21.1
Duluth-Superior, MN and WI	20	41.7	17	40.8	2.2
Baltimore, MD	21	40.8	18	39.5	3.3
Portland, OR	22	34.3	21	27.5	25.0
St. Louis, MO and IL	23	33.3	22	27.1	23.0
Freeport, TX	24	31.0	40	14.5	113.8
Portland, ME	25	29.3	51	10.8	172.3
Pascagoula, MS	26	28.7	24	26.5	8.4
Paulsboro, NJ	27	26.9	27	23.3	15.2
Seattle, WA	28	24.2	30	21.6	12.0
Chicago, IL	29	23.9	28	22.5	6.2
Marcus Hook, PA	30	22.6	25	25.9	-12.7
Port Everglades, FL	31	22.5	42	14.1	59.1
Tacoma, WA	32	22.3	31	21.4	4.0
Port Arthur, TX	33	21.4	20	30.7	-30.3
Charleston, SC	34	21.1	54	9.7	117.3
Boston, MA	35	20.8	29	21.9	-5.3
Jacksonville, FL	36	19.7	36	15.1	30.3
Savannah, GA	37	19.7	44	13.6	45.0
Richmond, CA	38	19.5	32	21.2	-8.0
Memphis, TN	39	18.3	47	12.4	47.8
Anacortes, WA	40	18.0	35	15.4	17.1
Detroit, MI	41	17.3	33	17.7	-2.5
Indiana Harbor, IN	42	16.2	37	14.7	10.3
Honolulu, HI	43	15.8	50	11.3	39.3
Cleveland, OH	44	14.4	41	14.4	0.2
Cincinnati, OH	45	14.3	46	12.6	13.6
Lorain, OH	46	14.2	43	14.0	1.5
San Juan, PR	47	13.9	39	14.5	-4.4
Newport News, VA	48	13.8	26	24.9	-44.6
Toledo, OH	49	13.3	38	14.7	-9.2
Two Harbors, MN	50	13.1	48	12.3	6.2
Total top 50		**2,217.3**		**1,877.9**	**18.1**
All ports		**2,461.6**		**2,163.9**	**13.8**

[a] Tonnage totals include both domestic and foreign waterborne trade.

NOTE: In 1990, Grays Harbor, Washington, ranked 45th (12.8).

SOURCES:
1990: U.S. Army Corps of Engineers, *Waterborne Commerce of the United States, Calendar Year 1990, Part 5, National Summaries* (New Orleans, LA: 1993), table 5-2.
2000: Ibid., *Waterborne Commerce of the United States, Calendar Year 2000, Part 5, National Summaries* (New Orleans, LA: 2002), tables 1-1 and 5-2.

Table 1-48: Growth of Freight Activity in the United States: Comparison of the 1997 and 1993 Commodity Flow Surveys

	Value			Tons			Ton-miles		
Mode of transportation	1997 (billion $ 1997)	1993 (billion $ 1997)	Percent change	1997 (millions)	1993 (millions)	Percent change	1997 (billions)	1993 (billions)	Percent change
All modes	**6,944.0**	**6,360.8**	**9.2**	**11,089.7**	**9,688.5**	**14.5**	**2,661.4**	**2,420.9**	**9.9**
Single modes	**5,719.6**	**5,376.3**	**6.4**	**10,436.5**	**8,922.3**	**17.0**	**2,383.5**	**2,136.9**	**11.5**
Truck[a]	4,981.5	4,791.0	4.0	7,700.7	6,385.9	20.6	1,023.5	869.5	17.7
For-hire truck	2,901.3	2,856.1	1.6	3,402.6	2,808.3	21.2	741.1	629.0	17.8
Private truck[b]	2,036.5	1,910.4	6.6	4,137.3	3,543.5	16.8	268.6	235.9	13.9
Rail	319.6	269.2	18.7	1,549.8	1,544.1	0.4	1,022.5	942.6	8.5
Water	75.8	67.1	13.1	563.4	505.4	11.5	261.7	272.0	-3.8
Shallow draft	53.9	44.3	21.7	414.8	362.5	14.4	189.3	164.4	15.2
Great Lakes	1.5	1.3	15.4	38.4	33.0	16.4	13.4	12.4	8.2
Deep draft	20.4	21.5	-4.9	110.2	109.9	0.2	59.0	95.2	-38.0
Air (includes truck and air)	229.1	151.3	51.4	4.5	3.1	42.6	6.2	4.0	55.5
Pipeline[c]	113.5	97.8	16.1	618.2	483.6	27.8	S	S	S
Multiple modes	**945.9**	**720.9**	**31.2**	**216.7**	**225.7**	**-4.0**	**204.5**	**191.5**	**6.8**
Parcel, U.S. Postal Service or courier	855.9	612.8	39.7	23.7	18.9	25.4	18.0	13.2	36.8
Truck and rail	75.7	90.4	-16.3	54.2	40.6	33.5	55.6	37.7	47.5
Truck and water	8.2	10.2	-19.4	33.2	68.0	-51.2	34.8	40.6	-14.4
Rail and water	1.8	4.0	-55.2	79.3	79.2	0.1	77.6	70.2	10.5
Other multiple modes	4.3	3.5	22.0	26.2	18.9	38.6	18.6	S	S
Other/unknown modes	**278.6**	**263.6**	**5.7**	**436.5**	**540.5**	**-19.2**	**73.4**	**92.6**	**-20.7**

KEY: S = data are not published because of high sampling variability or other reasons.

[a] Truck as a single mode includes shipments that went by private truck only, for-hire truck only, or a combination of both.
[b] Private truck refers to a truck operated by a temporary or permanent employee of an establishment or the buyer/receiver of the shipment.
[c] Excludes most shipments of crude oil.

NOTE: Numbers and percents may not add to totals due to rounding.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics and U.S. Department of Commerce, Census Bureau *1997 Economic Census, Transportation, 1997 Commodity Flow Survey* (Washington, DC: December 1999), table 1b; the Bureau of Transportation Statistics converted the value of 1993 commodities from 1993 current dollars to 1997 constant dollars using Bureau of Economic Analysis' chain-type price deflators.

Table 1-49: Value, Tons, and Ton-Miles of Freight Shipments within the United States by Domestic Establishments, 1997

SCTG	Commodity description	Value ($billions)	Tons (millions)	Ton-miles (billions)	Value per ton ($)	Average miles per shipment
01	Live animals and live fish	6.2	5.9	1.5	1,042	272
02	Cereal grains	59.6	489.7	200.6	122	125
03	Other agricultural products	102.3	201.7	80.8	508	438
04	Animal feed and products of animal origin (NEC)	66.8	219.7	46.8	304	79
05	Meat, fish, seafood, and their preparations	183.8	79.5	36.4	2,312	137
06	Milled grain products, preparations, and bakery products	109.9	102.7	48.5	1,069	122
07	Other prepared foodstuffs and fats and oils	346.4	396.9	124.1	873	127
08	Alcoholic beverages	87.9	81.1	27.8	1,085	58
09	Tobacco products	56.4	4.1	1.0	13,661	296
10	Monumental or building stone	2.7	15.9	1.5	172	115
11	Natural sands	4.3	442.5	25.5	10	46
12	Gravel and crushed stone	11.5	1,814.8	92.9	6	36
13	Nonmetallic minerals (NEC)	11.3	235.7	52.2	48	174
14	Metallic ores and concentrates	12.6	90.7	47.7	139	303
15	Coal	25.5	1,217.0	542.3	21	81
17	Gasoline and aviation turbine fuel	217.1	962.8	136.6	225	45
18	Fuel oils	94.3	481.7	51.2	196	28
19	Coal and petroleum products (NEC)	74.9	475.1	81.9	158	85
20	Basic chemicals	159.6	296.1	136.8	539	332
21	Pharmaceutical products	224.4	9.9	5.6	22,678	692
22	Fertitizers	27.3	179.1	43.6	153	116
23	Chemical products and preparations (NEC)	209.5	92.0	45.0	2,276	333
24	Plastics and rubber	278.8	130.4	69.1	2,138	451
25	Logs and other wood in the rough	15.1	370.7	28.1	41	85
26	Wood products	126.4	329.1	96.9	384	287
27	Pulp, newsprint, paper, and paperboard	106.6	152.3	83.7	700	194
28	Paper or paperboard articles	98.3	73.5	22.0	1,338	307
29	Printed products	260.3	78.1	22.8	3,335	431
30	Textiles, leather, and articles of textiles or leather	379.2	45.9	24.7	8,266	912
31	Nonmetallic mineral products	109.2	910.1	91.4	120	401
32	Base metal in primary or semifinished forms and in finished basic shapes	285.7	335.9	117.5	851	276
33	Articles of base metal	227.2	106.5	48.7	2,133	403
34	Machinery	417.1	49.9	27.0	8,356	356
35	equipment	869.7	39.6	27.1	21,955	640
36	Motorized and other vehicles (including parts)	571.0	98.1	45.9	5,822	278
37	Transportation equipment (NEC)	129.2	5.5	3.8	23,587	796
38	Precision instruments and apparatus	157.9	2.9	2.2	53,741	840
39	Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	97.3	19.9	11.6	4,885	625
40	Miscellaneous manufactured products	420.9	112.5	39.9	3,741	860
41	Waste and scrap	32.7	177.8	40.1	184	164
43	Mixed freight	230.4	110.3	17.2	2,090	252
	Commodity unknown	36.5	46.2	11.8	791	499

KEY: NEC = not elsewhere classified; SCTG=Standard Classification of Transportation Goods.

NOTE: The 1997 Commodity Flow Survey data reported in this table are based on SCTG code, which differs from the code used in the 1993 CFS. Therefore, data in this table are not directly comparable to the 1993 data reported in the 1998 edition of *National Transportation Statistics.*

SOURCES: U.S. Department of Transportation, Bureau of Trasnportation Statistics, U.S. Department of Commerce, Census Bureau, *1997 Economic Census* , Transportation 1997 C*ommodity Flow Survey (* Washington, DC: December 1999), table 7.

Table 1-50: Value of U.S. Land Exports to and Imports from Canada and Mexico by Mode ($ millions)

	1994	1995	1996	1997	1998	1999	2000
Exports to Canada							
Truck	89,151.1	97,423.4	102,743.0	111,173.8	114,806.1	123,140.0	129,825.3
Rail	13,593.9	15,271.9	15,678.7	13,255.6	12,279.6	11,754.6	12,946.5
Pipeline	133.8	121.3	162.2	180.6	93.4	113.9	161.6
Other[a]	21,753.2	17,010.5	20,467.5	9,336.1	10,559.5	11,360.0	11,913.4
Mail	69.3	57.0	58.3	24.1	6.8	5.6	0.6
Total	**124,701.3**	**129,884.1**	**139,109.7**	**133,970.2**	**137,745.4**	**146,374.1**	**154,847.4**
Exports to Mexico							
Truck	39,066.5	35,914.2	44,091.8	55,592.6	60,432.1	66,923.8	82,389.2
Rail	4,192.0	4,694.4	5,119.2	5,648.0	6,188.8	5,710.6	10,495.8
Pipeline	0.4	1.0	2.3	68.3	73.4	144.2	301.8
Other[a]	3,238.9	2,025.8	2,540.1	2,860.5	3,470.0	3,349.6	3,972.0
Mail[b]	5.5	26.8	–	0.1	0.1	0.7	0.5
Total	**46,503.3**	**42,662.2**	**51,753.4**	**64,169.5**	**70,164.4**	**76,129.0**	**97,158.9**
Imports from Canada							
Truck	79,456.4	88,964.9	98,400.8	99,814.8	108,856.7	118,901.4	127,816.3
Rail	30,322.8	39,996.9	39,811.000	38,293.0	37,374.1	46,255.4	49,699.2
Pipeline	9,728.6	10,606.6	12,796.2	13,879.5	11,120.1	12,055.5	23,117.1
Other[a]	3,991.6	3,888.2	4,968.4	3,572.5	4,575.1	6,386.9	9,571.0
Mail	5.5	5.2	[R]6.9	0.4	1.7	13.1	4.1
FTZ[c]	U	207.6	223.4	122.4	177.9	111.2	62.8
Total	**123,504.9**	**143,669.4**	**156,206.7**	**155,682.6**	**162,105.7**	**183,723.5**	**210,270.5**
Imports from Mexico							
Truck	35,013.9	43,014.3	48,350.0	56,716.5	65,883.7	76,448.0	88,668.7
Rail	7,769.0	9,137.9	12,297.7	12,646.9	12,029.7	[R]14,693.4	21,056.1
Pipeline	187.9	27.4	8.1	3.6	2.4	1.5	11.5
Other[a]	643.5	768.9	639.2	668.2	917.8	1,255.8	1,573.9
Mail	1.9	1.3	1.5	0.2	0.2	0.2	0.6
FTZ[c]	U	1,099.2	2,015.6	2,119.6	2,886.7	2,624.4	2,125.7
Total	**43,616.2**	**54,049.0**	**63,312.1**	**72,155.0**	**81,720.3**	**95,023.4**	**113,436.5**

KEY: – = value too small to report; R = revised; U = data are not available.

[a] Other includes "flyaway aircraft" or aircraft moving under their own power (i.e., aircraft moving from the manufacturer to a customer and not carrying any freight), powerhouse (electricity), vessels moving under their own power, pedestrians carrying freight, and unknown and miscellaneous.

[b] Beginning in January 1996, new edit checks were added to the processing of the Transborder Surface Freight Data. Because of these checks, the number of mail export shipments from the United States to Mexico declined sharply between 1995 and 1996. The Census Bureau found that a number of rail shipments were misidentified as mail shipments in 1994 and 1995, although the exact proportion of these is unknown.

[c] Foreign Trade Zones (FTZs) were added as a mode of transport for land import shipments beginning in April 1995. Although FTZs are being treated as a mode of transportation in the Transborder Surface Freight Data, the actual mode for a specific shipment into or out of an FTZ is unknown because U.S. Customs does not collect this information.

NOTES: Shipments that neither originate nor terminate in the United States (i.e., in transit, in-bond shipments) are not included here, although they use the U.S. transportation system. These shipments are usually part of Mexico-Canada trade, and simply pass through the United States. Transshipments, however, are included between 1994, 1995, and 1996; these are shipments that entered or exited the United States by way of a Customs port on the northern or southern border, but whose origin or destination was a country other than Canada or Mexico. Starting in 1997, transshipments are excluded. Users should note these differences before comparing figures for 1994-96 with 1997 and subsequent year data. Data exclude export shipments valued at less than $2,500 and import shipments valued at less than $1,250.
Individual modal totals may not sum to exact export or import totals due to rounding.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transborder Surface Freight Data, Internet site www.bts.gov/transborder, 2001.

Table 1-51: Crude Oil and Petroluem Products Transported in the United States by Mode

	1975	1980	1985	1990	1995	1996	1997	1998	1999
Crude Oil									
Ton-miles (billions)									
Pipelines[a]	288.0	362.6	334.4	334.8	335.9	338.3	337.4	334.1	321.1
Water carriers	40.6	[c]387.4	449.2	291.2	247.7	202.4	147.3	117.9	100.0
Motor carriers[b]	1.4	2.5	1.8	1.5	1.7	1.7	1.7	1.6	1.4
Railroads	1.5	0.5	0.8	0.7	0.8	0.8	0.5	0.5	0.5
Total	**331.5**	**753.0**	**786.2**	**628.2**	**586.0**	**543.2**	**486.9**	**454.1**	**423.0**
% of total									
Pipelines[a]	86.9	48.2	42.5	53.3	57.3	62.3	69.3	73.6	75.9
Water carriers	12.2	51.4	57.2	46.4	42.3	37.3	30.3	26.0	23.6
Motor carriers[b]	0.4	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Railroads	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Refined Petroleum Products									
Ton-miles (billions)									
Pipelines[a]	219.0	225.6	229.9	249.3	265.2	280.9	279.1	285.7	296.6
Water carriers	257.4	230.4	141.2	157.8	153.2	154.1	148.3	147.1	147.5
Motor carriers[b]	26.2	24.3	26.9	28.2	24.6	28.0	26.0	26.7	27.6
Railroads	12.6	12.0	11.3	13.3	15.9	16.0	16.2	16.2	18.2
Total	**515.2**	**492.3**	**409.3**	**448.6**	**458.9**	**479.0**	**469.6**	**475.7**	**489.9**
% of total									
Pipelines[a]	66.1	30.0	29.2	39.7	45.3	51.7	57.3	62.9	60.5
Water carriers	77.6	30.6	18.0	25.1	26.1	28.4	30.5	31.0	30.1
Motor carriers[b]	7.9	5.0	3.4	4.5	5.3	5.9	5.3	5.9	5.6
Railroads	3.8	1.6	2.7	2.1	2.7	2.9	3.5	3.4	3.7
Combined Crude and Petroleum Products									
Ton-miles (billions)									
Pipelines[a]	507.0	588.2	564.3	584.1	601.1	619.2	616.5	619.8	617.7
Water carriers	298.0	[c]617.8	590.4	449.0	400.9	356.5	295.6	265.0	247.5
Motor carriers[b]	27.6	26.8	28.7	29.7	26.3	29.7	27.7	28.3	29.0
Railroads	14.1	12.5	12.1	14.0	16.6	16.8	16.7	16.7	18.7
Total	**846.7**	**1,245.3**	**1,195.5**	**1,076.8**	**1,044.9**	**1,022.2**	**956.5**	**929.8**	**912.9**
% of total									
Pipelines[a]	59.9	47.2	47.2	54.2	57.5	60.6	64.5	66.7	67.7
Water carriers	35.2	49.6	49.4	41.7	38.4	34.9	30.9	28.5	27.1
Motor carriers[b]	3.3	2.2	2.4	2.8	2.5	2.9	2.9	3.0	3.2
Railroads	1.7	1.0	1.0	1.3	1.6	1.6	1.8	1.8	2.1

[a] The amount carried by pipeline is based on ton-miles of crude and petroleum products transported through federally regulated pipelines (84%), plus estimated ton-miles of crude and petroleum products transported through nonfederally regulated pipelines (16%).
[b] The amount carried by motor carriers is estimated.
[c] Reflects the entrance between 1975 and 1980 of the Alaska pipeline, moving crude petroluem for water transportation to U.S. refineries.

SOURCES: 1975: Association of Oil Pipe Lines, *Shifts in Petroleum Transportation* (Washington, DC: Annual issues), table 6.
1980-99: Ibid., *Shifts in Petroleum Transportation* (Washington, DC: Annual issues).

Table 1-52: U.S. Hazardous Materials Shipments by Mode of Transportation, 1997

Mode of Transportation	Value ($ million)	Percent	Tons (thousands)	Percent	Ton-miles (millions)	Percent
Single modes	**452.7**	**97.1**	**1,541.7**	**98.5**	**258.9**	**98.1**
Truck[a]	298.2	63.9	869.8	55.6	74.9	28.4
For-hire	134.3	28.8	336.4	21.5	45.2	17.1
Private[b]	160.7	34.5	522.7	33.4	28.8	10.9
Rail	33.3	7.1	96.6	6.2	74.7	28.3
Water	27.0	5.8	143.2	9.1	68.2	25.9
Air	8.6	1.8	0.1	–	0.1	–
Pipeline[c]	85.7	18.4	432.1	27.6	S	S
Multiple modes	**5.7**	**1.2**	**6.0**	**0.4**	**3.1**	**1.2**
Parcel, U.S. Postal Service or Courier	2.9	0.6	0.1	–	0.1	–
Other	2.9	0.6	5.9	0.4	3.0	1.1
Unknown and other modes	**7.9**	**1.7**	**17.5**	**1.1**	**1.8**	**0.7**
All modes	**466.4**	**100.0**	**1,565.2**	**100.0**	**263.8**	**100.0**

KEY: – = less than 1 unit of measure or equal to zero; S = data are not published because of high sampling variability or other reasons.

[a] Truck as a single mode includes shipments that went by private truck only, for-hire truck only, or a combination of both.
[b] Private truck refers to a truck operated by a temporary or permanent employee of an establishment or the buyer/receiver of the shipment.
[c] Excludes most shipments of crude oil. See previous table for the estimated amount of crude oil and petroleum products transported in the United States.

NOTE: Numbers and percents may not add to totals due to rounding.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, U.S. Department of Commerce, Census Bureau, 1997 Economic Census *1997 Commodity Flow Survey, Hazardous Materials* (Washington, DC: December 1999), table 1.

Table 1-53 U.S. Hazardous Materials Shipments by Hazard Class, 1997

Hazard Class and Description	Value ($ billion)	Percent	Tons (thousands)	Percent	Ton-miles (millions)	Percent	Average miles per shipment
Class 1. Explosives	4.3	0.9	1.5	0.1	S	S	549
Class 2. Gases	40.9	8.8	115.0	7.3	21.8	8.3	66
Class 3. Flammable liquids	335.6	72.0	1,264.3	80.8	160.0	60.6	73
Class 4. Flammable solids	3.9	0.8	11.8	0.8	9.6	3.6	838
Class 5. Oxidizers and organic peroxides	4.5	1.0	9.2	0.6	4.5	1.7	193
Class 6. Toxics (poison)	10.1	2.2	6.4	0.4	2.8	1.1	402
Class 7. Radioactive materials	2.7	0.6	0.9	0.1	RZ	RZ	445
Class 8. Corrosive materials	40.4	8.7	91.6	5.9	41.2	15.6	201
Class 9. Miscellaneous dangerous goods	23.9	5.1	65.3	4.2	22.7	8.6	323
Total	**466.4**	**100.0**	**1,565.2**	**100.0**	**263.8**	**100.0**	**113**

KEY: S = data were not published because of high sampling variability or other reasons; RZ = less than 1 unit of measure or equal to zero.

NOTE: Numbers and percents may not add to totals due to rounding.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics and U.S. Department of Commerce, Census Bureau, 1997 Economic Census *1997 Commodity Flow Survey, Hazardous Materials* (Washington, DC: December 1999), table 2.

Table 1-54: Worldwide Commercial Space Launches

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total 1990-2001
TOTAL space launches	**R15**	**12**	**14**	**R11**	**R15**	**R23**	**R24**	**R38**	**R41**	**R39**	**35**	**16**	**283**
United States													
Athena	0	0	0	0	0	1	0	R1	R1	3	0	0	6
Atlas	R1	2	3	R3	R4	R8	R7	6	R5	R4	3	1	47
Conestoga	0	0	0	0	0	1	0	0	0	0	0	0	1
Delta	R5	4	3	1	1	1	R3	7	11	5	2	1	44
Pegasus	0	0	0	1	0	R1	R1	3	R4	R2	2	0	14
Taurus	0	0	0	0	0	0	0	0	R1	1	0	1	3
Titan	3	0	0	0	0	0	0	0	0	0	0	0	3
Total	**R9**	**6**	**6**	**R5**	**R5**	**R12**	**R11**	**R17**	**R22**	**R15**	**7**	**3**	**118**
Europe													
Ariane 4	5	6	6	6	8	8	9	11	9	8	8	6	90
Ariane 5	0	0	0	0	0	0	0	0	0	0	4	2	6
Total	**5**	**6**	**6**	**6**	**8**	**8**	**9**	**11**	**9**	**8**	**12**	**8**	**96**
Russia													
Cosmos	0	0	0	0	0	0	0	0	0	1	2	0	3
Dnepr	0	0	0	0	0	0	0	0	0	1	1	0	2
Proton	0	0	0	0	0	0	2	6	4	5	6	2	25
Shtil	0	0	0	0	0	0	0	0	1	0	0	0	1
Soyuz	0	0	0	0	0	0	0	0	0	6	3	0	9
Start	0	0	0	0	0	0	0	1	0	0	1	1	3
Total	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**7**	**5**	**13**	**13**	**3**	**43**
Ukraine													
Zenit 2	0	0	0	0	0	0	0	0	1	0	0	0	1
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
China													
Long March 2C	0	0	0	0	0	0	0	1	4	1	0	0	6
Long March 2E	0	0	2	0	1	3	0	0	0	0	0	0	6
Long March 3	1	0	0	0	1	0	1	0	0	0	0	0	3
Long March 3B	0	0	0	0	0	0	1	2	0	0	0	0	3
Total	**1**	**0**	**2**	**0**	**2**	**3**	**2**	**3**	**4**	**1**	**0**	**0**	**18**
Sea Launch[a]													
Zenit 3SL	0	0	0	0	0	0	0	0	0	R2	3	2	7
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**R2**	**3**	**2**	**7**

KEY: R = revised.

[a] Sea Launch is an international venture involving organizations in four countries and uses its own launch facility outside national borders. Their first commercial launch, in 1999, was licensed by the Federal Aviation Administration.

NOTES: A commercial launch is a launch that is internationally competed, i.e., available in principle to international launch providers, or whose primary payload is commercial in nature. FAA-licensed launches carrying captive government (NASA and DoD) or industry payloads (ORBCOMM, Delta 3 demosat, Zenit 3SL demosat, and others) are counted here. Data are for orbital launches only.

SOURCES: 1990–99: U.S. Department of Transportation, Federal Aviation Administration, Associate Administrator for Commercial Space Transportation, personal communication, June 4, 2002.
2000-2001: Ibid., *Commercial Space Transportation: 2001 Year in Review* (Washington, DC: January 2002), Internet site http://ast.faa.gov/launch_info/ as of June 4, 2002.

Table 1-55: Passengers Denied Boarding by the Largest U.S. Air Carriers[a]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Boarded (millions)	421	429	445	449	457	460	481	503	514	523	543	498
Denied boarding[b] (thousands)												
Voluntary	561	599	718	632	771	794	899	1,018	R1,091	1,024	1,062	899
Involuntary	67	47	46	51	53	49	58	54	45	46	57	43
Total	**628**	**646**	**764**	**683**	**824**	**843**	**957**	**1,071**	**R1,136**	**1,070**	**1,120**	**942**
% denied boarding	0.15	0.15	0.17	0.15	0.18	0.18	0.20	0.21	0.22	0.20	0.21	0.19

KEY: R = revised.

[a] Data are for nonstop scheduled service flights between points within the United States (including territories) by the 10 largest U.S. air carriers, i.e., those with at least 1% of total domestic scheduled-service passenger revenues (Alaska, America West, American, Continental, Delta, Northwest, Southwest, TWA, United, and US Airways). Before 1994, carriers included both majors and national airlines, i.e., airlines with over $100 million in revenue.

[b] Number of passengers who hold confirmed reservations and are denied boarding ("bumped") from a flight because it is oversold. These figures include only passengers whose oversold flight departs without them; they do not include passengers affected by canceled, delayed, or diverted flights.

SOURCE: U.S. Department of Transportation, Office of the Secretary, *Air Travel Consumer Report* (Washington, DC: Annual April issues).

Table 1-56: Mishandled-Baggage Reports Filed by Passengers with the Largest U.S. Air Carriers[a]

	1990[b]	1991[c]	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total mishandled-baggage reports (millions)	**2.66**	**2.20**	**2.45**	**2.28**	**2.32**	**2.28**	**2.46**	**2.28**	**2.48**	**2.54**	**2.74**	**2.22**
Enplaned passengers (domestic) (millions)	395.7	408.5	417.0	407.5	435.7	439.8	464.0	459.8	481.7	499.1	517.4	488.4
Reports per 1,000 passengers	6.73	5.38	5.87	5.60	5.33	5.18	5.30	4.96	5.16	5.08	5.29	4.55

[a] Data include nonstop scheduled service between points within the United States (including territories) by the 10 largest U.S. air carriers, i.e., those with at least 1% of the total domestic scheduled service passenger revenues (Alaska, America West, American, Continental, Delta, Northwest, Southwest, TWA, United, and US Airways).

[b] Includes Pan Am.

[c] Includes Pan Am and Midway.

NOTES: Domestic system only.
Based on passenger reports of mishandled baggage, including those that did not subsequently result in claims for compensation.

SOURCE: U.S. Department of Transportation, Office of the Secretary, *Air Travel Consumer Report* (Washington, DC: Annual compilation, February).

Table 1-57: Flight Operations Arriving On Time by the Largest U.S. Air Carriers[a] (Percent)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
On-time flight operations	79.4	82.5	82.3	81.6	81.5	78.6	74.5	77.7	77.2	76.1	72.6	77.4

[a] Data include nonstop scheduled service between points within the United States (including territories) by the 10 largest U.S. air carriers, i.e., those with at least 1% of the total domestic scheduled service passenger revenues (Alaska, America West, American, Continental, Delta, Northwest, Southwest, TWA, United, and US Airways).

NOTES: A flight is considered on time if it arrived less than 15 minutes after the scheduled time shown in the carriers' Computerized Reservations Systems. Canceled and diverted operations are counted as late.

SOURCE: U.S. Department of Transportation, Office of the Secretary, *Air Travel Consumer Report* (Washington, DC: Annual compilation, February), table 1a, 12-month column.

Table 1-58: FAA-Cited Causes of Departure and Enroute Delays
(After pushing back from the gate)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	[a]2000
Operations delayed (thousands)	356	338	394	393	298	281	276	248	237	272	245	306	374	450
Cause (%)														
Weather	67	70	57	56	65	65	72	75	72	[R]74	68	74	[R]69	69
Airport terminal volume	11	9	29	35	27	27	22	19	18	18	22	15	[R]12	14
ARTCC volume	13	12	8	2	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
Closed runways/taxiways	4	5	3	3	3	3	3	2	3	3	3	3	[R]5	6
NAS equipment	4	3	2	1	2	2	2	2	3	2	3	2	2	2
Other	1	1	1	4	3	3	2	2	4	2	4	6	[R]13	9

KEY: ARTCC = Air Route Traffic Control Center; NAS = National Airspace System; R = Revised.

[a] Data is preliminary and subject to change.

[b] Delays due to ARTCC volume are included in delays due to terminal volume from 1991.

NOTE: Percentages may not add to 100 due to rounding.

SOURCES: 1987-97: U.S. Department of Transportation, Federal Aviation Administration, *Aviation Capacity Enhancement Plan* (Washington, DC: Annual issues).
1998-2000: U.S. Department of Transportation, Federal Aviation Administration, Internet site www.faa.gov/apa/Delays/atDelays.htm as of Oct. 8, 2001.

Table 1-59: Major U.S. Air Carrier Delays, Cancellations, and Diversions

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	R2000	2001
Total operations	**5,202,096**	**5,041,200**	**5,270,893**	**5,076,925**	**5,092,157**	**5,070,501**	**5,180,048**	**5,327,435**	**5,351,983**	**5,411,843**	**5,384,721**	**5,527,884**	**5,683,047**	**5,967,780**
Late departures	730,712	883,167	753,182	621,509	617,148	661,056	729,960	919,839	1,102,484	944,633	1,014,904	1,091,584	1,319,153	1,180,673
Late arrivals	1,042,452	1,208,470	1,087,774	890,068	902,567	931,437	960,254	1,141,647	1,362,702	1,193,678	1,227,741	1,320,591	1,557,784	1,343,608
Cancellations	50,163	74,165	52,458	43,505	52,836	59,845	66,740	91,905	128,536	97,763	144,509	154,311	187,490	231,198
Diversions	14,436	14,839	15,954	12,585	11,384	10,333	12,106	10,492	14,121	12,081	13,161	13,555	14,254	12,909

KEY: R = Revised.

NOTES: Late departures and arrivals are strongly seasonal and are affected by weather and heavy demand in winter and summer months. The term "late" is defined as 15 minutes after the scheduled departure or arrival time. Major air carriers are the 10 largest U.S. air carriers. A cancelled flight is one that was not operated, but was listed in a carrier's computer reservation system within seven calendar days of the scheduled departure. A diverted flight is one that left from the scheduled departure airport but flew to a destination point other than the scheduled destination point.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, Airline Service Quality Performance data.

Table 1-60: Annual Person-Hours of Highway Traffic Delay Per Capita[R]

Population group	Urban area	[R]1982	1985	[R]1990	1991	[R]1992	1993	1994	[R]1995	[R]1996	[R]1997	1998	1999	Percent change: Short-term 1995-1999[R] Percent[a]	Short-term 1995-1999[R] Rank[a]	Long-term 1982-1999[R] Percent[a]	Long-term 1982-1999[R] Rank[a]
Med	Albany-Schenectady-Troy, NY	1	2	6	6	6	6	6	6	7	7	8	10	67	9	900	8
Med	Albuquerque, NM	4	7	12	12	14	17	23	25	28	32	32	33	32	31	725	13
Lrg	Atlanta, GA	11	20	25	22	25	32	43	43	49	55	53	53	23	40	382	31
Med	Austin, TX	9	16	20	21	22	26	28	33	35	45	44	45	36	27	400	27
Sml	Bakersfield, CA	1	1	4	4	5	4	4	5	5	6	6	6	20	43	500	20
Lrg	Baltimore, MD	8	13	27	26	25	25	27	30	29	30	30	31	3	60	288	44
Sml	Beaumont, TX	4	6	5	6	7	6	6	7	7	9	7	9	29	34	125	63
Vlg	Boston, MA	12	20	28	28	30	33	34	37	38	39	41	42	14	49	250	46
Sml	Boulder, CO	1	2	2	3	3	4	4	4	4	5	6	5	25	39	400	27
Sml	Brownsville, TX	1	1	2	2	2	2	2	2	2	2	3	3	50	18	200	53
Lrg	Buffalo-Niagara Falls, NY	2	3	4	4	4	4	4	4	4	5	6	8	100	2	300	43
Med	Charlotte, NC	6	14	22	26	23	21	20	22	27	33	32	32	45	21	433	26
Vlg	Chicago, IL-Northwestern, IN	11	17	23	25	25	27	26	28	30	31	34	34	21	42	209	52
Lrg	Cincinnati, OH-KY	4	7	15	15	18	20	23	24	26	29	30	32	33	28	700	14
Lrg	Cleveland, OH	1	2	6	7	8	10	12	15	17	18	18	20	33	28	1,900	1
Sml	Colorado Springs, CO	1	3	3	4	6	7	9	11	12	14	17	20	82	4	1,900	1
Lrg	Columbus, OH	3	4	15	15	17	17	20	21	24	28	28	29	38	26	867	10
Sml	Corpus Christi, TX	3	3	4	5	6	5	5	5	5	5	6	7	40	25	133	61
Lrg	Dallas, TX	8	17	23	25	26	29	30	32	32	38	40	46	44	23	475	23
Lrg	Denver, CO	13	16	20	21	25	29	29	34	36	38	42	45	32	30	246	47
Vlg	Detroit, MI	12	14	32	33	37	39	37	37	40	41	40	41	11	53	242	48
Med	El Paso, TX-NM	2	3	5	7	9	10	11	9	8	9	11	14	56	14	600	16
Sml	Eugene-Springfield, OR	1	2	2	2	3	5	3	4	5	6	7	10	150	1	900	8
Lrg	Fort Worth, TX	5	10	14	13	14	16	18	19	20	23	27	33	74	6	560	17
Med	Fresno, CA	4	5	15	13	12	9	8	10	12	14	15	18	80	5	350	36
Lrg	Fort Lauderdale -Hollywood-Pompano Beach, Fl	7	7	12	15	20	22	20	20	22	25	25	29	45	22	314	42
Med	Hartford-Middletown, CT	6	13	17	16	17	12	12	13	14	16	17	19	46	20	217	51
Med	Honolulu, HI	8	9	17	17	19	19	19	19	19	19	19	19	0	62	138	60
Vlg	Houston, TX	27	38	32	28	27	32	32	31	36	42	49	50	61	13	85	66

continued

Table 1-60 *continued*

Population group	Urban area	R1982	1985	R1990	1991	R1992	1993	1994	R1995	R1996	R1997	1998	1999	Percent change: Short-term 1995-1999R Percent[a]	Short-term 1995-1999R Rank[a]	Long-term 1982-1999R Percent[a]	Long-term 1982-1999R Rank[a]
Lrg	Indianapolis, IN	3	4	9	11	15	25	33	44	44	46	38	37	-16	68	1,133	5
Med	Jacksonville, FL	5	7	20	21	25	26	27	33	30	29	28	30	-9	66	500	20
Lrg	Kansas City, MO-KS	2	3	7	6	8	12	13	14	16	19	19	24	71	7	1,100	6
Sml	Laredo, TX	1	1	1	2	2	2	3	3	4	4	5	5	67	9	400	27
Lrg	Las Vegas, NV	5	9	22	22	17	17	19	20	21	20	20	21	5	59	320	40
Vlg	Los Angeles, CA	31	36	59	57	57	54	52	55	56	55	55	56	2	61	81	67
Med	Louisville, KY-IN	8	8	9	12	17	23	27	25	28	32	35	37	48	19	363	33
Med	Memphis, TN-AR-MS	2	3	10	11	13	14	18	22	23	25	24	22	0	62	1,000	7
Lrg	Miami-Hialeah, FL	17	20	38	37	40	41	42	39	38	41	42	42	8	56	147	59
Lrg	Milwaukee, WI	4	7	11	12	14	17	17	18	19	20	20	22	22	41	450	24
Lrg	Minneapolis-St. Paul, MN	3	7	15	15	18	21	25	27	27	33	35	38	41	24	1,167	4
Med	Nashville, TN	13	13	18	16	15	18	24	27	28	34	34	42	56	14	223	50
Lrg	New Orleans, LA	10	15	15	17	16	15	17	18	17	17	18	18	0	62	80	68
Vlg	New York, NY-Northeastern, NJ	8	10	22	21	21	22	25	27	30	33	33	34	26	38	325	38
Lrg	Norfolk, VA	9	17	20	17	15	15	17	19	23	25	24	24	26	37	167	56
Lrg	Oklahoma City, OK	4	4	6	7	8	8	7	10	12	14	14	17	70	8	325	38
Med	Omaha, NE-IA	3	5	10	11	12	12	15	16	18	17	18	19	19	45	533	18
Lrg	Orlando, FL	10	18	24	29	33	35	33	33	37	40	42	42	27	36	320	40
Vlg	Philadelphia, PA-NJ	8	11	16	18	18	18	20	20	22	24	26	26	30	32	225	49
Lrg	Phoenix, AZ	12	13	23	24	24	25	25	24	29	29	30	31	29	33	158	57
Lrg	Pittsburgh, PA	6	7	11	11	11	11	11	12	12	12	14	14	17	46	133	61
Lrg	Portland-Vancouver, OR-WA	4	7	17	18	22	29	28	30	34	32	32	34	13	50	750	12
Med	Providence-Pawtucket, RI-MA	3	7	17	15	14	16	17	18	21	21	26	28	56	14	833	11
Med	Rochester, NY	1	2	4	5	5	5	6	7	8	8	7	8	14	48	700	14
Lrg	Sacramento, CA	9	13	31	31	27	29	31	30	36	33	32	34	13	50	278	45
Sml	Salem, OR	1	1	6	6	7	9	9	9	11	13	14	14	56	14	1,300	3
Med	Salt Lake City, UT	3	4	8	11	13	15	18	20	21	20	18	18	-10	67	500	20
Lrg	San Antonio, TX	5	9	8	8	10	8	9	13	15	16	18	24	85	3	380	32
Lrg	San Bernardino-Riverside, CA	6	14	31	32	32	34	34	35	37	35	38	38	9	55	533	18
Lrg	San Diego, CA	8	14	33	30	32	31	30	31	31	31	34	37	19	44	363	33
Vlg	San Francisco-Oakland, CA	20	29	42	39	39	39	37	39	40	38	41	42	8	56	110	65
Lrg	San Jose, CA	19	28	41	41	39	37	37	39	39	37	39	42	8	56	121	64

continued

Table 1-60 *continued*

Population group	Urban area	R1982	1985	R1990	1991	R1992	1993	1994	R1995	R1996	R1997	1998	1999	Percent change: Short-term 1995-1999R Percent[a]	Short-term 1995-1999R Rank[a]	Long-term 1982-1999R Percent[a]	Long-term 1982-1999R Rank[a]
Lrg	Seattle-Everett, WA	19	29	48	50	55	49	48	46	47	51	53	53	15	47	179	54
Sml	Spokane, WA	2	3	4	6	5	8	9	6	7	9	9	10	67	9	400	27
Lrg	St. Louis, MO-IL	10	16	18	17	20	35	38	39	40	42	43	44	13	52	340	37
Med	Tacoma, WA	5	8	17	19	19	20	21	21	22	25	26	27	29	34	440	25
Med	Tampa, FL	13	15	26	31	33	33	38	38	36	35	35	35	-8	65	169	55
Med	Tucson, AZ	5	5	11	10	11	14	14	14	16	22	25	23	64	12	360	35
Vlg	Washington, DC-MD-VA	18	27	40	39	41	40	41	42	45	44	45	46	10	54	156	58
	68 Area Average[b]	11	16	26	26	27	28	29	30	32	34	35	36	20		227	
	Very Large Area Average[b]	15	21	33	33	33	33	34	35	38	39	40	41	17		173	
	Large Area Average[b]	8	12	21	21	23	25	26	28	29	31	32	34	21		325	
	Medium Area Average[b]	5	8	14	15	16	17	19	21	22	24	24	26	24		420	
	Small Area Average[b]	2	2	4	4	5	6	6	6	7	8	9	10	67		400	

KEY: R = revised.
Vlg = very large urban areas – over 3 million population.
Lrg = large urban areas – over 1 million and less than 3 million population.
Med = medium urban areas – over 500,000 and less than 1 million population.
Sml = small urban areas – less than 500,000 population.

[a] Percent change was calculated using the numbers in this table and were not obtained from the source mentioned below. Rank is based on the calculated percent change with the highest number corresponding to a rank of 1.
[b] For the years 1982, 1992, and 1999, the averages were obtained from table A-5 from the Texas Transportation Instutute's *The 2001 Annual Urban Mobility Report* referenced below. For other years, the averages were calculated using data obtained from the web site.

NOTES: The cities shown represent the 50 largest metropolitan areas, as well as others chosen by the states sponsoring the Texas Transportation Institute study on mobility.
The source, for the year 2001, decided to only publish hours of delay per capita, contrary to previous years when the source would publish data for eligible drivers, as well as per capita. To account for this change, the entire table has been updated to reflect the data based on hours of delay per capita.

SOURCE: 1982 - 99: Texas Transportation Institute, *The 2001 Annual Urban Mobility Report* (College Station, TX: 2001) from Internet site http://mobility.tamu.edu accessed on Sept. 14, 2001.

Table 1-61: Roadway Congestion Index

Population group	Urban area	1982	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Percent change: Short-term 1995-1999[R] Percent[a]	Percent change: Short-term 1995-1999[R] Rank[a]	Percent change: Long-term 1982-1999[R] Percent[a]	Percent change: Long-term 1982-1999[R] Rank[a]
Med	Albany-Schenectady-Troy, NY	[R]0.46	0.51	0.68	0.67	0.69	0.71	0.71	0.72	0.74	0.75	0.75	0.77	7	22	67	61
Med	Albuquerque, NM	[R]0.62	0.69	0.85	0.84	0.87	0.92	0.98	[R]1.02	[R]1.06	[R]1.12	1.12	1.13	11	49	82	68
Lrg	Atlanta, GA	[R]0.77	0.93	[R]0.98	0.97	[R]0.99	1.05	1.13	[R]1.13	1.17	[R]1.24	1.28	1.27	12	59	65	59
Med	Austin, TX	[R]0.73	0.81	[R]0.90	0.90	[R]0.87	0.87	0.90	0.94	[R]0.97	[R]1.02	1.04	1.06	13	60	45	38
Sml	Bakersfield, CA	[R]0.54	0.56	[R]0.64	0.67	[R]0.70	0.68	0.71	0.72	0.74	0.75	0.76	0.77	7	22	43	35
Lrg	Baltimore, MD	[R]0.75	0.80	[R]0.95	0.95	[R]0.97	0.97	1.00	1.03	[R]1.03	1.05	1.06	1.07	4	15	43	36
Sml	Beaumont, TX	[R]0.68	0.72	[R]0.74	0.78	[R]0.83	0.82	0.78	[R]0.80	0.84	[R]0.85	0.85	0.86	7	30	26	14
Vlg	Boston, MA	[R]0.88	0.98	[R]1.09	1.09	[R]1.11	1.17	1.19	[R]1.21	1.22	[R]1.25	1.27	1.28	6	20	45	39
Sml	Boulder, CO	[R]0.55	0.59	[R]0.65	0.66	[R]0.70	0.71	0.72	0.74	[R]0.76	[R]0.81	0.83	0.83	12	58	51	46
Sml	Brownsville, TX	[R]0.54	0.54	0.62	0.62	0.64	0.68	0.69	0.70	[R]0.71	[R]0.73	0.76	0.75	7	25	39	33
Lrg	Buffalo-Niagara Falls, NY	[R]0.53	0.55	[R]0.60	0.62	[R]0.64	0.66	0.68	[R]0.67	[R]0.66	[R]0.68	0.70	0.72	7	29	36	30
Med	Charlotte, NC	[R]0.86	1.02	[R]1.05	1.04	[R]0.98	0.94	0.93	[R]0.95	[R]1.01	[R]1.07	1.09	1.14	20	68	33	22
Vlg	Chicago, IL-Northwestern, IN	[R]0.95	1.02	[R]1.18	1.19	[R]1.17	1.17	1.17	[R]1.22	[R]1.27	[R]1.27	1.31	1.31	7	28	38	31
Lrg	Cincinnati, OH-KY	[R]0.70	0.78	[R]0.92	0.90	0.91	0.95	1.00	1.00	[R]1.04	[R]1.09	1.11	1.12	12	55	60	58
Lrg	Cleveland, OH	[R]0.68	0.65	[R]0.83	0.83	[R]0.85	0.89	0.91	[R]0.92	[R]0.94	[R]0.96	0.98	0.99	8	31	46	40
Sml	Colorado Springs, CO	[R]0.50	0.60	[R]0.62	0.61	[R]0.64	0.66	0.68	[R]0.73	[R]0.76	[R]0.81	0.83	0.85	16	65	70	63
Lrg	Columbus, OH	[R]0.63	0.68	[R]0.86	0.88	[R]0.90	0.92	0.94	[R]0.95	1.00	1.04	1.05	1.05	11	46	67	60
Sml	Corpus Christi, TX	[R]0.57	0.65	[R]0.67	0.66	[R]0.67	0.65	0.64	[R]0.64	[R]0.66	[R]0.70	0.70	0.71	11	50	25	12
Lrg	Dallas, TX	[R]0.78	0.91	0.99	1.01	1.01	0.99	0.97	0.98	1.00	1.04	1.04	1.05	7	25	35	25
Lrg	Denver, CO	[R]0.82	0.86	[R]0.92	0.93	[R]0.97	0.99	1.02	[R]1.07	[R]1.12	[R]1.14	1.18	1.20	12	57	46	41
Vlg	Detroit, MI	[R]0.89	0.91	1.08	1.09	1.16	1.19	1.15	[R]1.16	[R]1.18	1.18	1.18	1.20	3	13	35	26
Med	El Paso, TX-NM	[R]0.62	0.70	[R]0.73	0.78	0.82	0.83	0.85	[R]0.85	[R]0.84	0.86	0.91	0.94	11	48	52	48
Sml	Eugene-Springfield, OR	[R]0.53	0.58	[R]0.68	0.69	[R]0.70	0.74	0.75	0.78	0.82	0.84	0.87	0.91	17	66	72	65
Lrg	Fort Lauderdale -Hollywood-Pompano Beach, FL	[R]0.69	0.75	[R]0.90	0.95	[R]1.03	1.05	1.03	[R]1.05	[R]1.07	[R]1.12	1.12	1.17	11	52	70	62
Lrg	Fort Worth TX	0.73	0.82	0.92	0.89	0.90	0.86	0.87	0.87	0.90	0.91	0.94	0.96	10	44	32	21
Med	Fresno, CA	[R]0.67	0.65	[R]0.89	0.88	[R]0.87	0.85	0.85	0.87	[R]0.89	[R]0.92	0.96	1.00	15	63	49	44
Med	Hartford-Middletown, CT	[R]0.61	0.74	[R]0.85	0.85	[R]0.87	0.84	0.85	[R]0.86	[R]0.87	0.90	0.91	0.94	9	41	54	52
Med	Honolulu, HI	[R]0.79	0.84	[R]1.03	1.03	[R]1.04	1.05	1.07	1.07	1.07	1.06	1.06	1.06	-1	4	34	24
Vlg	Houston, TX	[R]1.03	1.11	[R]1.05	1.00	0.99	1.02	1.00	[R]1.00	[R]1.03	1.07	1.10	1.10	10	43	7	1
Lrg	Indianapolis, IN	[R]0.64	0.69	[R]0.83	0.85	[R]0.91	0.96	1.04	[R]1.11	[R]1.11	[R]1.13	1.12	1.11	0	6	73	66
Med	Jacksonville, FL	[R]0.75	0.81	[R]0.94	0.96	[R]0.98	1.00	1.02	[R]1.04	[R]1.02	[R]1.01	1.01	1.00	-4	1	33	23
Lrg	Kansas City, MO-KS	[R]0.50	0.58	[R]0.63	0.61	[R]0.63	0.69	0.71	0.72	0.75	0.76	0.77	0.79	10	42	58	54
Sml	Laredo, TX	[R]0.55	0.56	[R]0.56	0.57	[R]0.56	0.54	0.54	[R]0.53	0.56	[R]0.60	0.63	0.61	15	64	11	4
Lrg	Las Vegas, NV	[R]0.69	0.78	[R]1.08	1.11	[R]1.08	1.14	1.13	[R]1.12	[R]1.12	[R]1.11	1.13	1.18	5	19	71	64
Vlg	Los Angeles, CA	[R]1.29	1.31	[R]1.59	1.58	[R]1.56	1.54	1.50	[R]1.52	[R]1.56	[R]1.54	1.58	1.58	4	16	22	11

continued

Table 1-61 *continued*

Population group	Urban area	1982	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Percent change: Short-term 1995-1999[R] Percent[a]	Short-term 1995-1999[R] Rank[a]	Long-term 1982-1999[R] Percent[a]	Long-term 1982-1999[R] Rank[a]
Med	Louisville, KY-IN	[R]0.78	0.78	0.80	0.84	0.89	0.95	0.99	[R]1.00	1.02	[R]1.05	1.08	1.09	9	38	40	34
Med	Memphis, TN-AR-MS	[R]0.71	0.70	[R]0.88	0.88	[R]0.89	0.89	0.94	[R]0.96	[R]0.98	[R]0.98	0.99	0.98	2	10	38	32
Lrg	Miami-Hialeah, FL	[R]0.95	0.99	[R]1.20	1.17	[R]1.20	1.19	1.22	[R]1.25	[R]1.23	[R]1.23	1.22	1.23	-2	3	29	18
Lrg	Milwaukee, WI	[R]0.71	0.80	[R]0.92	0.92	[R]0.92	0.89	0.91	[R]0.94	[R]0.99	1.01	1.02	1.05	12	53	48	43
Lrg	Minneapolis-St. Paul, MN	[R]0.66	0.76	0.89	0.91	0.93	0.98	1.04	1.06	1.08	1.13	1.18	1.20	13	62	82	67
Med	Nashville, TN	[R]0.83	0.81	0.85	0.84	[R]0.85	0.85	0.90	0.93	[R]0.93	[R]0.98	0.97	1.01	9	37	22	10
Lrg	New Orleans, LA	[R]0.92	0.97	[R]0.94	0.96	[R]0.95	0.94	0.99	[R]0.99	[R]0.96	[R]0.97	1.00	0.99	0	6	8	2
Vlg	New York, NY-Northeastern, NJ	[R]0.77	0.84	[R]0.99	0.98	[R]0.97	0.99	1.02	1.04	[R]1.08	[R]1.13	1.14	1.15	11	47	49	45
Lrg	Norfolk, VA	[R]0.89	1.01	[R]0.96	0.90	[R]0.87	0.88	0.91	0.93	0.97	0.97	0.96	0.97	4	17	9	3
Lrg	Oklahoma City, OK	[R]0.65	0.71	0.73	0.74	0.74	0.78	0.77	0.82	0.84	0.85	0.86	0.88	7	27	35	28
Med	Omaha, NE-IA	[R]0.62	0.70	[R]0.75	0.76	[R]0.79	0.80	0.80	[R]0.81	[R]0.84	[R]0.85	0.87	0.90	11	51	45	37
Lrg	Orlando, FL	[R]0.82	0.93	[R]0.95	0.97	[R]0.97	0.97	0.96	[R]0.97	[R]1.00	[R]1.04	1.05	1.05	8	35	28	16
Vlg	Philadelphia, PA-NJ	[R]0.82	0.86	[R]0.94	0.99	0.98	0.96	0.97	[R]0.97	[R]0.98	[R]1.02	1.05	1.06	9	40	29	17
Lrg	Phoenix, AZ	[R]0.95	0.98	[R]1.01	1.03	1.06	1.05	1.04	[R]1.08	[R]1.14	[R]1.12	1.16	1.21	12	56	27	15
Lrg	Pittsburgh, PA	[R]0.70	0.73	0.75	0.75	0.74	0.74	0.74	0.76	0.76	0.76	0.78	0.78	3	11	11	6
Lrg	Portland-Vancouver, OR-WA	[R]0.81	0.90	[R]1.01	1.03	1.07	1.10	1.12	1.15	1.20	1.22	1.22	1.24	8	33	53	51
Med	Providence-Pawtucket, RI-MA	[R]0.70	0.83	[R]0.89	0.88	0.83	0.82	0.82	0.84	0.87	[R]0.89	0.93	0.95	13	61	36	29
Med	Rochester, NY	[R]0.51	0.57	[R]0.69	0.70	[R]0.72	0.72	0.74	[R]0.77	[R]0.77	[R]0.76	0.77	0.78	1	8	53	50
Lrg	Sacramento, CA	[R]0.76	0.88	[R]1.05	1.05	[R]1.07	1.09	1.12	1.12	[R]1.17	1.14	1.18	1.20	7	24	58	53
Sml	Salem, OR	[R]0.56	0.64	[R]0.79	0.81	[R]0.79	0.79	0.79	0.77	[R]0.79	0.82	0.86	0.85	10	45	52	49
Med	Salt Lake City, UT	[R]0.66	0.71	[R]0.84	0.89	0.91	0.95	1.01	1.04	1.05	[R]1.01	1.01	1.00	-4	1	52	47
Lrg	San Antonio, TX	[R]0.69	0.79	[R]0.74	0.74	[R]0.77	0.78	0.81	[R]0.87	0.89	0.92	0.96	1.02	17	67	48	42
Lrg	San Bernardino-Riverside, CA	[R]0.78	0.90	[R]1.15	1.16	1.15	1.14	1.12	1.16	[R]1.18	[R]1.16	1.20	1.24	7	21	59	57
Lrg	San Diego, CA	[R]0.79	0.90	[R]1.19	1.18	[R]1.18	1.16	1.16	[R]1.16	[R]1.16	[R]1.15	1.19	1.25	8	32	58	55
Vlg	San Francisco-Oakland, CA	[R]1.06	1.17	[R]1.35	1.32	1.32	1.33	1.31	1.34	[R]1.35	[R]1.36	1.37	1.39	4	14	31	19
Lrg	San Jose, CA	[R]1.07	1.13	[R]1.24	1.25	[R]1.22	1.18	1.15	[R]1.13	[R]1.11	[R]1.11	1.13	1.19	5	18	11	5
Lrg	Seattle-Everett, WA	[R]1.07	1.17	1.21	1.21	1.17	1.18	1.19	1.20	1.22	[R]1.25	1.26	1.30	8	36	21	9
Sml	Spokane, WA	[R]0.66	0.71	[R]0.74	0.77	[R]0.74	0.73	0.77	0.76	[R]0.78	[R]0.80	0.81	0.83	9	39	26	13
Lrg	St. Louis, MO-IL	[R]0.87	0.94	[R]0.91	0.90	[R]0.92	0.95	0.99	1.00	1.01	[R]1.02	1.01	1.03	3	12	18	7
Med	Tacoma, WA	[R]0.75	0.78	[R]0.91	0.96	[R]1.02	1.08	1.10	1.10	1.11	1.15	1.18	1.19	8	34	59	56
Med	Tampa, FL	0.91	0.87	1.02	1.07	1.09	1.11	1.11	1.11	1.09	[R]1.08	1.08	1.10	-1	5	21	8
Med	Tucson, AZ	[R]0.80	0.76	0.89	0.93	0.93	0.96	0.95	0.94	[R]0.97	1.00	1.04	1.05	12	53	31	20
Vlg	Washington, DC-MD-VA	0.99	1.13	[R]1.24	1.23	[R]1.28	1.31	1.34	1.32	1.32	1.33	1.35	1.34	2	9	35	27

continued

Table 1-61 *continued*

Population group	Urban area	1982	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Percent change: Short-term 1995-1999R Percent[a]	Short-term 1995-1999R Rank[a]	Long-term 1982-1999R Percent[a]	Long-term 1982-1999R Rank[a]
	68 Area Average [b]	0.83	0.90	1.02	1.02	1.03	1.04	1.05	1.07	1.09	1.11	1.13	1.14	7		38	
	Very Large Area Average [b]	0.97	1.04	1.19	1.19	1.18	1.19	1.19	1.21	1.23	1.25	1.27	1.28	6		32	
	Large Area Average [b]	0.75	0.83	0.94	0.94	0.95	0.96	0.99	1.00	1.02	1.05	1.06	1.09	8		44	
	Medium Area Average [b]	0.68	0.74	0.85	0.87	0.88	0.89	0.91	0.93	0.95	0.96	0.98	0.99	7		45	
	Small Area Average [b]	0.56	0.62	0.67	0.68	0.69	0.69	0.70	0.71	0.74	0.77	0.78	0.79	10		39	

KEY: R = revised.
Vlg = very large urban areas – over 3 million population.
Lrg = large urban areas – over 1 million and less than 3 million population.
Med = medium urban areas – over 500,000 and less than 1 million population.
Sml = small urban areas – less than 500,000 population.

[a] Percent change was calculated using the numbers in this table and were not obtained from the source mentioned below. Rank is based on the calculated percent change with the lowest number corresponding to a rank of 1.
[b] For the years 1982, 1992, and 1999, the average RCI was obtained from table A-17 from the Texas Transportation Instutute's *The 2001 Annual Urban Mobility Report* referenced below. For other years, the average RCI was calculated using data obtained from the web site and the RCI formula in the report.

NOTES: The roadway congestion index (RCI) is a measure of vehicle travel density on major roadways in an urban area.
An RCI exceeding 1.0 indicates an undesirable congestion level, on average, on the freeways and principal arterial street system during the peak period.
The cities shown represent the 50 largest metropolitan areas, as well as others chosen by the states sponsoring the Texas Transportation Institute study on mobility.
Due to changes in methodology, data for all years shown were revised. For a detailed explanation of the formulas used, see the source document.

SOURCE: 1982–1999: Texas Transportation Institute, *The 2001 Annual Urban Mobility Report* (College Station, TX: 2001); RCI data and population groups were obtained from Internet site http://mobility.tamu.edu accessed on Sept. 14, 2001.

Table 1-62: Annual Highway Congestion Cost

Population group	Urban area	Annual congestion cost per capita ($)						Annual congestion cost ($ millions)					
		[R]1997 Value	1998 Value	1999 Value	[R]1997 Rank	1998 Rank	1999 Rank	1997 Value	1998 Value	1999 Value	1997 Rank	1998 Rank	1999 Rank
Med	Albany-Schenectady-Troy, NY	110	140	180	60	59	58	55	70	90	59	59	58
Med	Albuquerque, NM	535	530	575	26	28	26	[R]300	300	325	[R]46	46	46
Lrg	Atlanta, GA	910	885	915	2	3	3	[R]2,345	2,475	2,620	[R]7	8	8
Med	Austin, TX	745	740	785	5	6	5	[R]470	475	510	[R]30	32	34
Sml	Bakersfield, CA	105	105	105	62	62	65	40	40	40	61	62	62
Lrg	Baltimore, MD	510	505	530	28	30	32	[R]1,095	1,085	1,150	[R]19	20	20
Sml	Beaumont, TX	110	105	170	60	62	61	[R]15	15	25	[R]65	65	65
Vlg	Boston, MA	645	680	715	13	11	12	[R]1,950	2,045	2,155	[R]9	9	9
Sml	Boulder, CO	90	90	85	64	66	66	10	10	10	66	66	67
Sml	Brownsville, TX	U	35	65	68	68	68	U	5	10	68	68	67
Lrg	Buffalo-Niagara Falls, NY	80	100	135	65	64	62	[R]85	105	145	[R]58	57	56
Med	Charlotte, NC	540	545	550	24	27	30	[R]320	335	345	[R]43	44	44
Vlg	Chicago, IL-Northwestern, IN	510	560	570	28	22	28	[R]4,055	4,505	4,605	3	3	3
Lrg	Cincinnati, OH-KY	490	525	575	30	29	26	[R]625	670	735	[R]26	25	26
Lrg	Cleveland, OH	310	305	350	47	47	46	[R]580	575	655	[R]28	29	28
Sml	Colorado Springs, CO	240	270	330	52	52	49	[R]100	115	145	[R]55	56	56
Lrg	Columbus, OH	465	480	500	33	32	34	[R]470	490	515	[R]30	30	33
Sml	Corpus Christi, TX	80	95	110	65	65	64	25	30	35	63	63	64
Lrg	Dallas, TX	630	675	780	15	13	6	[R]1,465	1,600	1,865	12	12	11
Lrg	Denver, CO	640	695	760	14	9	8	[R]1,150	1,270	1,415	[R]18	17	17
Vlg	Detroit, MI	665	665	700	9	15	16	[R]2,675	2,665	2,810	[R]4	5	5
Med	El Paso, TX-NM	150	190	245	58	57	55	90	120	160	[R]56	55	55
Sml	Eugene-Springfield, OR	95	115	180	63	61	58	20	25	40	[R]64	64	62
Lrg	Fort Lauderdale-Hollywood-Pompano Beach, FL	410	420	500	35	38	34	[R]595	610	735	[R]27	27	26
Lrg	Fort Worth, TX	385	450	570	39	34	28	[R]500	610	780	[R]29	27	25
Med	Fresno, CA	220	255	310	54	53	52	120	140	170	54	54	54
Med	Hartford-Middletown, CT	285	305	335	48	47	48	[R]180	195	215	[R]52	52	52
Med	Honolulu, HI	325	330	345	43	43	47	[R]230	230	240	[R]50	51	51
Vlg	Houston, TX	700	825	850	7	4	4	[R]2,175	2,575	2,665	[R]8	7	7
Lrg	Indianapolis, IN	750	630	635	4	17	20	[R]760	635	645	23	26	29
Med	Jacksonville, FL	490	475	520	30	33	33	[R]405	400	440	[R]37	38	40
Lrg	Kansas City, MO-KS	320	325	410	46	45	40	[R]435	445	570	[R]34	34	30
Sml	Laredo, TX	60	55	85	67	67	66	10	10	15	66	66	66
Lrg	Las Vegas, NV	325	330	370	43	43	45	[R]375	410	465	[R]39	37	37
Vlg	Los Angeles, CA	920	935	1,000	1	1	1	[R]11,290	11,670	12,570	1	1	1
Med	Louisville, KY-IN	530	585	635	27	19	20	[R]440	485	530	[R]33	31	31
Med	Memphis, TN-AR-MS	405	385	375	37	41	44	[R]390	375	365	[R]38	41	43
Lrg	Miami-Hialeah, FL	660	680	705	10	11	14	[R]1,370	1,410	1,485	[R]15	15	16
Lrg	Milwaukee, WI	325	340	380	43	42	43	410	425	480	36	35	36
Lrg	Minneapolis - St. Paul, MN	565	605	670	19	18	19	[R]1,290	1,400	1,565	[R]16	16	14
Med	Nashville, TN	570	575	710	18	21	13	[R]360	365	455	[R]40	43	38
Lrg	New Orleans, LA	275	285	305	49	51	53	[R]305	315	335	[R]45	45	45
Vlg	New York, NY-Northeastern, NJ	545	555	595	23	24	24	[R]8,890	9,095	9,745	2	2	2
Lrg	Norfolk, VA	410	405	415	35	40	39	[R]420	415	430	[R]35	36	41
Lrg	Oklahoma City, OK	235	250	295	53	54	54	235	255	305	49	50	47
Med	Omaha, NE-IA	270	295	330	50	50	49	[R]155	170	195	[R]53	53	53
Lrg	Orlando, FL	650	685	705	12	10	14	[R]695	745	790	[R]25	23	24
Vlg	Philadelphia, PA-NJ	390	425	435	38	37	38	[R]1,775	1,940	1,990	10	10	10
Lrg	Phoenix, AZ	485	495	540	32	31	31	[R]1,160	1,230	1,385	17	18	18
Lrg	Pittsburgh, PA	195	220	235	56	56	56	[R]350	395	420	[R]41	39	42
Lrg	Portland-Vancouver, OR-WA	555	550	610	22	25	22	[R]800	810	910	[R]22	22	22
Med	Providence-Pawtucket, RI-MA	355	435	490	40	36	36	[R]320	395	445	[R]43	39	39
Med	Rochester, NY	145	120	135	59	60	62	[R]90	75	85	[R]56	58	59
Lrg	Sacramento, CA	560	550	605	20	25	23	[R]725	740	830	[R]24	24	23
Sml	Salem, OR	215	235	235	55	55	56	[R]40	45	45	[R]61	61	61
Med	Salt Lake City, UT	335	315	320	42	46	51	[R]295	280	285	47	47	49
Lrg	San Antonio, TX	270	305	410	50	47	40	[R]335	375	510	[R]42	41	34
Lrg	San Bernardino-Riverside, CA	605	645	685	17	16	17	[R]825	905	965	[R]21	21	21
Lrg	San Diego, CA	540	580	675	24	20	18	[R]1,420	1,560	1,820	[R]13	13	13

continued

Table 1-62 *continued*

Population group	Urban area	Annual congestion cost per capita ($)						Annual congestion cost ($ millions)					
		R1997 Value	1998 Value	1999 Value	R1997 Rank	1998 Rank	1999 Rank	1997 Value	1998 Value	1999 Value	1997 Rank	1998 Rank	1999 Rank
Vlg	San Francisco-Oakland, CA	660	700	760	10	8	8	R2,625	2,805	3,055	R5	4	4
Lrg	San Jose, CA	620	670	750	16	14	10	R1,005	1,105	1,250	20	19	19
Lrg	Seattle-Everett, WA	855	890	930	3	2	2	R1,680	1,760	1,860	11	11	12
Sml	Spokane, WA	170	155	180	57	58	58	R55	50	60	R59	60	60
Lrg	St. Louis, MO-IL	695	720	745	8	7	11	R1,385	1,435	1,495	R14	14	15
Med	Tacoma, WA	430	445	490	34	35	36	R255	265	295	R48	49	48
Med	Tampa, FL	560	560	590	20	22	25	R465	475	520	R32	32	32
Med	Tucson, AZ	355	410	395	40	39	42	R230	270	265	50	48	50
Vlg	Washington, DC-MD-VA	725	755	780	6	5	6	R2,495	2,610	2,730	R6	6	6
	68-Area Average [a]	560	582	625				1,004	1,058	1,145			
	Very Large Area Average [a]	646	675	710				4,214	4,434	4,700			
	Large Area Average [a]	520	538	590				830	875	970			
	Medium Area Average [a]	396	410	445				272	285	315			
	Small Area Average [a]	132	142	170				32	35	43			

KEY: R = revised; U = unavailable.
Vlg = Very Large Urban Areas - over 3 million population.
Lrg = Large Urban Areas - over 1 million and less than 3 million population.
Med = Medium Urban Areas - over 500,000 and less than 1 million population.
Sml = Small Urban Areas - less than 500,000 population.

[a] For the year 1999, data was obtained from table A-9 from the Texas Transportation Instutute's *The 2001 Annual Urban Mobility Report* referenced below. For other years, the averages were calculated using data obtained from the web site.

NOTES: The cities shown represent the 50 largest metropolitan areas, as well as others chosen by the states sponsoring the Texas Transportation Institute study on mobility.
The cost of congestion is estimated with a value for each hour of travel time and each gallon of fuel. For a more detailed explanation of the formulas used, see the source document.
The source, for the year 2001, decided to only publish congestion cost per capita, contrary to previous years when the source would publish data for eligible drivers, as well as per capita. To account for this change, the entire table has been updated to reflect the data based on congestion cost per capita.

SOURCE: 1997-99: Texas Transportation Institute, *The 2001 Annual Urban Mobility Report* (College Station, TX: 2001) obtained from Internet site http://mobility.tamu.edu accessed on Sept. 14, 2001.

Table 1-63: Amtrak On-Time Performance Trends and Hours of Delay by Cause

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
On-time performance, total % (weighted)	69	81	76	77	77	72	72	76	71	74	79	79	78
Short distance (<400 miles)	71	82	82	82	82	79	78	81	76	79	81	80	81
Long distance (>=400 miles)	64	78	53	59	61	[a]47	49	57	49	53	59	61	56
Hours of delay by cause[a]													
Amtrak[b]	N	N	3,565	5,915	6,433	8,488	8,538	5,527	5,193	5,310	4,796	4,891	20,187
Freight[c]	N	N	4,244	7,743	8,229	12,827	14,319	11,224	11,438	12,904	14,202	16,158	33,718
Other[d]	N	N	4,316	7,426	8,185	11,675	11,871	8,497	8,425	7,611	8,291	8,203	14,718
Total[e]	**N**	**N**	**12,126**	**21,084**	**22,847**	**32,991**	**34,729**	**25,248**	**25,056**	**25,825**	**27,289**	**29,252**	**68,623**

KEY: N = data do not exist.

[a] Beginning in 2000, the significant increase in hours of delay is the result of including the hours of delay from both Amtrak's Northeast Corridor and operations on contract railroads. The data also reflects the addition of several delay categories. Therefore, pre-2000 data may not be comparable to data from 2000 and subsequent years.
[b] Amtrak delays include equipment malfunctions, train servicing in stations, and passenger-related delays.
[c] Freight delays include maintenance of way/slow orders, freight train interference, and signal delays.
[d] Other delays include passenger train interference, waiting for connections, running time, weather-related delays, and miscellaneous.
[e] Numbers may not add to totals due to rounding.

NOTES: All percentages are based on Amtrak's fiscal year (October 1–September 30).
Amtrak trips are considered delayed based on the following chart:

Trip length (miles)	Delayed departure time (minutes)
0-250	10
251-350	15
351-450	20
451-550	25
≥551	30

SOURCES:
On-time performance:
1980: Amtrak, *National Railroad Passenger Corporation Annual Report* (Washington, DC: 1981).
1985–2000: Ibid., *Amtrak Annual Report,* Statistical Appendix (Washington, DC: Annual issues).
Hours of Delay:
1980: Amtrak, *National Railroad Passenger Corporation Annual Report* (Washington, DC: 1981).
1985–99: Ibid., *Amtrak Annual Report,* Statistical Appendix (Washington, DC: Annual issues).
2000: Amtrak, personal communication, Dec. 4, 2001.